SAN CLEMENTE SHORELINE FEASIBILITY STUDY
ORANGE COUNTY, CALIFORNIA

FEASIBILITY PHASE REVISED
PROJECT MANAGEMENT PLAN

Los Angeles District
South Pacific Division

Dec 2006

CONCURRENCE PAGE

As members of the Los Angeles District Project Review Board, we the undersigned, concur in the Project Management Plan (PMP) dated July 2006 for the San Clemente Shoreline Feasibility Study. We understand that the PMP is a living management document that will be updated throughout the course of the study.

Name	Title	Signature	Date
Brian M. Moore	Deputy District Engineer		
Thomas D. McKercher	Chief Contracting Division		
Robert C. Koplin	Chief, Engineering Division		
Jay C. Edwards	Chief, Resource Management Office		
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San Clemente Shoreline Feasibility Phase
Project Management Plan

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CHAPTER 1 – PURPOSE AND SCOPE

Definition of a Project Management Plan

a. The project management plan for the feasibility phase, herein after referred to as the PMP, is an attachment to the Feasibility Cost Sharing Agreement (FCSA), which defines the planning approach, activities to be accomplished, schedule, and associated costs that the Federal Government and the local sponsor(s) will be supporting financially. The PMP, therefore defines a contract between the Corps and the local Sponsor(s), and reflects a "buy in" on the part of the financial backers, as well as those who will be performing, and reviewing, the activities involved in the feasibility study. The PMP describes the initial tasks of the feasibility phase, continues through the preparation of the final feasibility report, the project management plan for project implementation and design agreement, and concludes with support during the Washington-level review of the final feasibility report.

b. The PMP is a basis for change. Because planning is an iterative process without a predetermined outcome, more or less costs and time may be required to accomplish reformulation and evaluations of the alternatives. Changes in scope will occur as the technical picture unfolds. With clear descriptions of the scopes and assumptions outlined in the PMP, deviations are easier to identify. The impact in either time or money is easily assessed and decisions can be made on how to proceed. The PMP provides a basis for change.

c. The PMP is a basis for the review and evaluation of the feasibility report. Since the PMP represents a contract among study participants, it will be used as the basis to determine if the draft feasibility report has been developed in accordance with established procedures and previous agreements. The PMP reflects mutual agreements of the district, division, sponsor and HQUSACE into the scope, critical assumptions, methodologies, and level of detail for the studies that are to be conducted during the feasibility study. Review of the draft report will be to insure that the study has been developed consistent with these agreements. The objective is to provide early assurance that the project is developed in a way that can be supported by higher headquarters.

d. The PMP is a study management tool. It includes scopes of work that are used for funds allocation by the project manager. It forms the basis for identifying commitments to the non-Federal sponsor and serves as a basis for performance measurement.

Summary of Project Management Plan Contents

This PMP is comprised of the following chapters:

- Chapter 1 - Purpose and Scope. This chapter includes the definition of the PMP and a summary of the PMP requirements.

- Chapter 2 - Section 905(b) Analysis. This chapter includes the approved Section 905(b) Analysis that includes an overview of the reconnaissance study findings, the plan formulation rationale, and proposed streamlining initiatives. This chapter also

documents any deviations from the approved Section 905(b) Analysis that have occurred during the negotiations of the FCSA.

- Chapter 3 - Work Breakdown Structure. A product based Work Breakdown Structure (WBS) defines the project, sub-projects, parent tasks, and tasks that will be accomplished through the study.

- Chapter 4 - Scopes of Work. A detailed scope of the tasks and activities that describe the work to be accomplished, in narrative form, that answers the questions: "what, how, and how much". This chapter provides a reference to the detailed scopes of work that are included as Enclosure C to the PMP.

- Chapter 5 - Responsibility Assignment. An Organizational Breakdown Structure (OBS) will define "who" will perform work on the study. This allows the identification of the functional organization that will perform each of the tasks in a Responsibility Assignment Matrix (RAM).

- Chapter 6 – Feasibility Study Schedule. The schedule will define "when" key decision points, CESPD milestone conferences, and mandatory HQUSACE milestones will be accomplished.

- Chapter 7 - Feasibility Cost Estimate. This is the baseline estimate for the feasibility phase of the study.

- Chapter 8 - Quality Management Plan: This chapter supplements the district's Quality Management Plan. It highlights any deviations to the district's plan and lists the members of the study team and the independent review team.

- Chapter 9 - Identification of Procedures and Criteria: This chapter identifies references to the regulations and other guidance that covers the planning process and reporting procedures.

- Chapter 10 - Coordination Mechanisms: This chapter describes the study's public involvement program.

CHAPTER 2 – SECTION 905(b) (WRDA 86) ANALYSIS

Study Authority

This Section 905(b) (WRDA 86) Analysis was prepared as an initial response to the Energy and Water Development Appropriations Act for 2000, Public Law 106-60, 29 September 1999, which reads as follows:

> *The Committee recommendation includes funds for the Corps of Engineers to conduct a reconnaissance study investigating shoreline protection alternatives for San Clemente, California.*

Study Purpose

The purpose of the reconnaissance phase study is to determine if there is a Federal interest in participating in a cost shared feasibility phase study to investigate providing shore protection to the shoreline in the City of San Clemente in Orange County, California. The increased erosion of the shoreline has caused a considerable amount of concern among local officials. Since the El Nino storms of 1983, the beach width has continued to erode; and, based on local beach width measurements taken in 1999, is less than half the widths measured in 1958 and 1981. In response to the study authority, the reconnaissance study was initiated on 28 March 2000. The reconnaissance study has resulted in the finding that there is a Federal interest in continuing the study into the feasibility phase. The purpose of this Section 905(b) Analysis is to document the basis for this finding and establish the scope of the feasibility phase. As the document that establishes the scope of the feasibility study, the Section 905(b) Analysis is the chapter of the Project Management Plan which presents the reconnaissance overview and formulation rationale.

Study Area, Non-Federal Sponsor and Congressional District

The study area is located on the Pacific Ocean coastline at the City of San Clemente, Orange County, California. It includes the entire San Clemente shoreline, approximately 8 kilometers (5 miles) in length, from Shorecliff Beach to San Mateo Point. Narrow, sandy beaches, backed by high coastal bluffs, characterize the shoreline. Running along the entire length of the San Clemente shoreline is a portion of the Lossan (Los Angeles to San Diego) railroad corridor, a major passenger rail line linking San Diego to the rest of the United States, owned by the Orange County Transportation Authority (OCTA). This nationally strategic rail corridor is among the busiest in the country and separates the beach from the bluff. San Clemente shares its downcoast border with San Diego County.

The Non-Federal Sponsor for the feasibility phase study is the City of San Clemente.

The study area is in the 48th Congressional District.

Prior Reports and Existing Projects

The following reports have been reviewed as part of this study:

1. *Oceanographic Design Conditions for the Repair of the San Clemente Pier*, Moffatt & Nichol Engineers, 1983. This report documents oceanographic data from the 1982-1983 winter storms, which destroyed approximately 134 meters (440 feet) of the San Clemente Pier. Design suggestions from this data and previous storm data are proposed for the repair of the pier.

2. *State of the Coast Report, San Diego Region, River Sediment Discharge Study Report*, Corps of Engineers, 1988. This report presents the findings of a study estimating the sediment delivery to the coast from streams and watersheds draining to the California Coast in the San Diego Region, which extended north to the Dana Point headlands. It concludes that 90% of the average annual yields of sands came from major rivers and the other 10% yielded from coastal streams.

3. *State of the Coast Report, Coast of California Storm and Tidal Wave Study, San Diego Region, Littoral Zone Sediments Report*, Corps of Engineers, 1988. This report presents the findings from the collection, analysis, and interpretation of sedimentologic data from the littoral zone. From the findings, littoral segments along the southern California coast and the most likely transport direction within each of these littoral segments are defined.

4. *State of the Coast Report, San Diego Region, Historic Wave and Sea Level Data Report*, Corps of Engineers, 1988. This report presents statistically analyzed historic wave data and recent wave hindcasts for Southern Hemisphere swells and tropical storms that have impacted the San Diego region. The tide regime, historic and predicted extremes of sea level, and a chronology of extreme storm events are also presented.

5. *State of the Coast Report, Coast of California Storm and Tidal Wave Study , San Diego Region, Main Report*, Corps of Engineers, 1991. This report suggests that the condition of the beaches in the future will be governed by cycles of accretion and erosion similar to those of the past 50 years, but with accelerated trends toward erosion because of the reduction in fluvial delivery due to impediment by dams and river mining, the influence of Oceanside Harbor interrupting alongshore sediment transport, and the increasing rate of sea level rise.

6. *Wave Information Studies of US Coastlines, Southern California Hindcast Wave Information*, Corps of Engineers, 1992. This report presents hindcast wave information from 1956 to1975 for the region south of Point Conception to the Mexican border. The sources of wave energy and local effects that control the wave climate included in this report consists of northern Pacific swell, east Pacific wind fields and associated waves, localized effects such as sheltering and diffraction by islands, and meso-scale meteorological systems such as land-sea breezes.

7. *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, Military Traffic Command, Transportation Agency, 1998. This study updates the designation of the Strategic Rail Corridor Network (STRACNET) and its associated connector lines to verify that the rails meet defense readiness requirements for maintenance condition, clearance, and gross weight capability. STRACNET maintains a rail line running parallel to the coastline throughout the City of San Clemente.

8. *Beach Width and Profile Surveys*, City of San Clemente, 2000. Results of beach width measurements taken by the City at 16 locations in 1958, 1981 and 1999 are presented. Also, results of benthic elevations along the pier from 1981 to the present are provided. The data indicates that there has been a significant increase in the loss of sand along the City's coastal stretch.

9. *Draft Mitigated Negative Declaration, Marblehead Coastal Beach Replenishment Project*, City of San Clemente, 2000. This CEQA document describes a private beach nourishment project along the San Clemente shoreline.

There are no Federal projects in the study area.

Plan Formulation

During a feasibility study, six planning steps that are set forth in the Water Resource Council's Principles and Guidelines are repeated to focus the planning effort and eventually to select and recommend a plan for authorization. The six planning steps are: 1) specify problems and opportunities; 2) inventory and forecast conditions; 3) formulate alternative plans; 4) evaluate effects of alternative plans; 5) compare alternative plans, and 6) select a recommended plan. The iterations of the planning steps typically differ in the emphasis that is placed on each of the steps.

In the early iterations, those conducted during the reconnaissance phase, the step of specifying problems and opportunities is emphasized. That is not to say, however, that the other steps are ignored, since the initial screening of preliminary plans that results from the other steps is very important to the scoping of feasibility phase studies. The sub-paragraphs that follow present the results of the initial iterations of the planning steps that were conducted during the reconnaissance phase. This information will be refined in future iterations of the planning steps during the feasibility phase.

National Objectives

The national or Federal objective of water and related land resources planning is to contribute to national economic development consistent with protecting the nation's environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. Contributions to National Economic Development (NED) are increases in net value of the national output of goods and services, expressed in monetary units. Contributions to NED are the direct benefits that accrue in the planning area and the rest of the nation.

Public Concerns

A number of public concerns have been identified during the course of the reconnaissance study. Initial concerns were expressed in the study authorization. Additional input was received through coordination with the City of San Clemente in conjunction with initial coordination with other agencies. The public concerns that are related to the establishment of planning objectives and planning constraints are:

1. Beach erosion threatens the stability of City facilities and private properties.

2. Beach erosion and high wave runup threaten the stability of the railroad corridor.

3. Public safety issue related to the possible relocation of public restroom facilities from the beach to the landward side of the railroad tracks, thereby causing pedestrians to cross the tracks more often.

4. Public safety issue related to the loss of sand and the resulting potential danger of exposed underlying hard substrate and man-made structures.

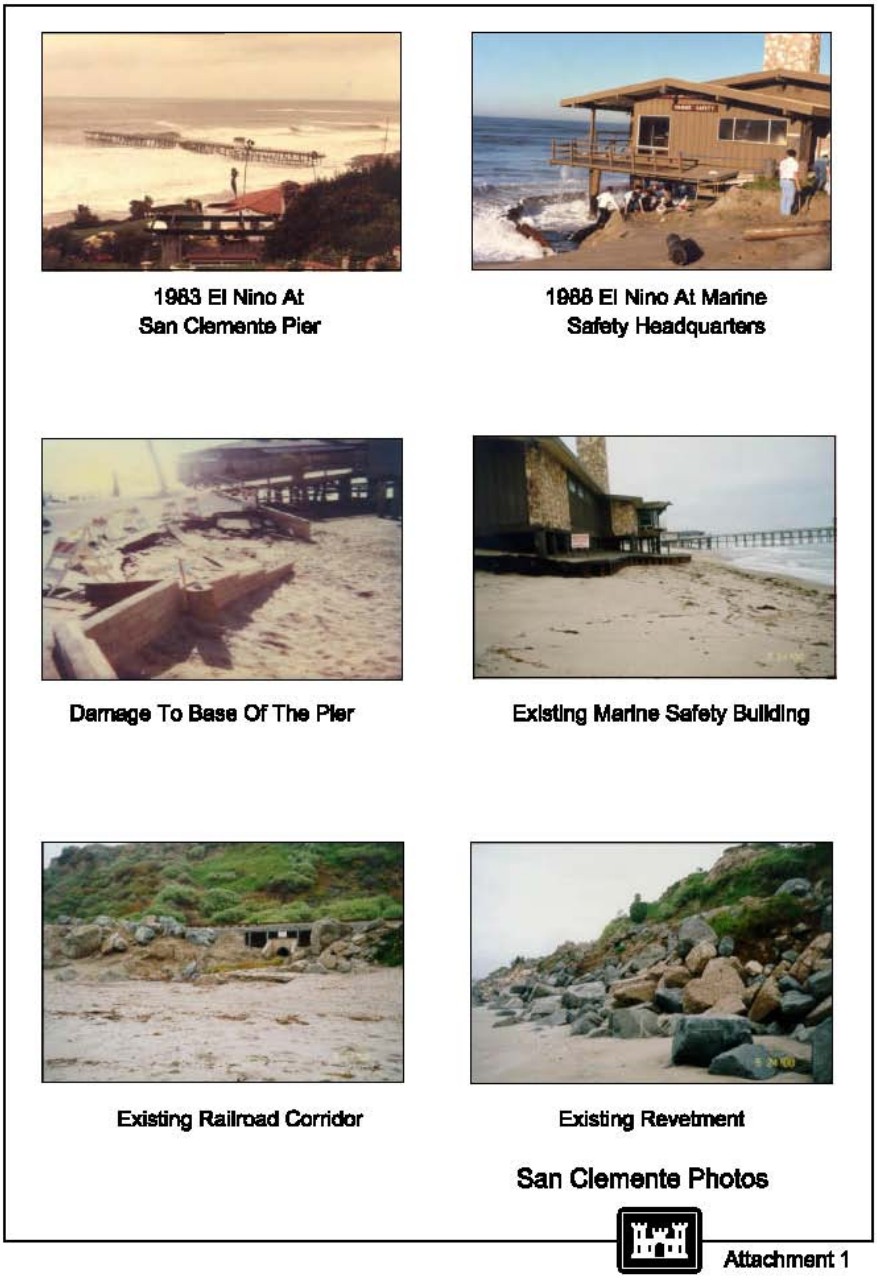
5. Liability impact from accidents caused by exposed man-made structures.

6. Shoreline retreat impacts on tourism resulting in adverse economic repercussions.

Problems and Opportunities

The evaluation of public concerns often reflects a range of needs which are perceived by the public. This section describes these needs in the context of problems and opportunities that can be addressed through water and related land management. For each problem and opportunity, the existing conditions and the expected future conditions are described, as follows:

Storm Damages. Over the past 20 years, average beach widths in the City's beaches have been gradually reduced to about 15 meters (50 feet). The greatest reduction in beach width during the last decade has occurred within the 1,370-meter (4,500-foot) stretch from Mariposa Street to Cristobal Street. Also, bottom elevation surveys along the Municipal pier since 1981 indicate that the cross-shore is deepened with a maximum fluctuation of about 4.6 meters (15 feet) at various locations. A reduction in the San Clemente beach width has subjected City facilities and private properties to storm wave-induced damages. These facilities, maintained by the City of San Clemente and the Orange County Department of Harbors Beaches and Parks include the Marine Safety Building, public restroom facilities located on the beach, lifeguard stations, parking areas, and paving near the pier. In addition, the riprap seawall protecting the Capistrano Shores Trailer Court, a private community of trailer owners located at the northern end of San Clemente, required $250,000 in repairs following the 1998 El Nino season. Local officials report that since the beach has eroded, trailer court residents have been experiencing direct effects of winter storms, such as waves overtopping the seawall. The following photos illustrate past storm and present beach conditions. Continued erosion along the San Clemente shoreline will increase damage to City facilities and private properties. Shoreline protection improvement and/or widening the existing beach will reduce or eliminate the storm-related damages.



Threat to the Railroad Corridor. Due to chronic beach erosion, the railroad corridor between the bluff and the beach is threatened by undermining. As an expedient, the Orange County Transportation Authority (OCTA) has been randomly placing riprap stones along the most critical segment between North Beach and the Marine Safety Building to reduce wave impacts on the railroad tracks. This maintenance practice of adding additional stones to the existing under-designed revetment has cost the OCTA an average of $200,000 to $300,000 over every three-year period. If the loss of sand continues as expected, the cost to protect the tracks with riprap will increase. Crews are dispatched during high tide and storm conditions to visually inspect for track damage that could cause derailments. The cumulative impact of stone placement

over the years has been in a curtailment of lateral beach access. This railroad is a vital transportation link for passenger and freight service. During winter storm events, train service has been delayed in order to provide extra precautionary measures to move the trains safely through the area. In addition, the Department of Defense has designated this right-of-way as a Strategic Rail Corridor with great significance to National defense. Continued erosion along the San Clemente shoreline will lead to further disruption of rail service.

Public Safety and Liability. As a result of the continued beach erosion throughout the City of San Clemente, a number of public safety concerns have surfaced. Public restrooms are located on the beach, seaward (west) of the railroad tracks. Continued damages to these facilities could require their relocation to the landward side (east) of the railroad tracks. This would require pedestrians to continually cross the tracks to use the restrooms. A public safety issue is created because many will cross the railroad tracks in an unsafe manner. Furthermore, the loss of sand within the active nearshore profile has exposed underlying hard substrate and man-made structures. A public safety issue is created because the exposed material, in many cases, remains underwater and hidden from sight posing a number of potential dangers to unwary recreational swimmers. The City of San Clemente is liable for accidents resulting from exposed man-made structures. The adverse economic impact associated with the City's liability has the potential to be substantial.

Recreation Opportunity. San Clemente has an annual tourist visitation of some two million people, approximately 60% non-residents. Continuous shoreline retreat will further degrade the City's beaches and significantly impact beach recreation, tourism, and economic benefits.

Planning Objectives

The national objectives of National Economic Development and National Ecosystem Restoration are general statements and not specific enough for direct use in plan formulation. The water and related land resource problems and opportunities identified in this study are stated as specific planning objectives to provide focus for the formulation of alternatives. These planning objectives reflect the problems and opportunities and represent desired positive changes in the without-project conditions. The planning objectives are specified as follows:

1. To reduce storm-related damages to public and private properties.

2. To protect and maintain the rail transit corridor.

3. To enhance and maintain beach recreation and associated economic tourism benefits, by restoring and improving the beaches.

Planning Constraints

Unlike planning objectives that represent desired positive changes, planning constraints represent restrictions that should not be violated. The planning constraints identified in this study are as follows:

1. Alternatives must comply with the City's applicable ordinances.

2. All alternatives should comply with various regulatory agencies such as the California Coastal Commission, California Regional Water Quality Control Board, California Department of Fish and Game, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, as well as the regulations and planning guidelines of the Corps of Engineers.

Measures to Address Planning Objectives

A management measure is a feature or activity at a site addressing one or more of the planning objectives. A wide variety of measures were considered, some of which were found to be infeasible due to technical, economic, or environmental constraints. Each measure was assessed and a determination made regarding whether it should be retained in the formulation of alternative plans. The descriptions and results of the evaluations of the measures considered in this study are presented below:

No Action

If no action is proposed, the beaches will continue to diminish and storm damages will increase in severity. The erosion-prone beaches will be further depleted, increasing the threat to the railroad corridor. Public safety and liability problems will not be resolved, and recreational activity on the beaches will be degraded resulting in a loss of associated economic benefits.

Nonstructural

No nonstructural measures are considered viable for this area.

Structural

Alternatives including beachfill, revetments, sheetpile walls, and sand breakwaters are being considered.

Beachfill. Beach nourishment involves placement of compatible sand from a borrow area to effectively widen the beach. The beach fill material acts as a buffer dissipating storm waves and runup over the wider profile. Retention structures may be required to stabilize the beachfill or extend the time between nourishment cycles, as well as preserve a minimum dry beach width.

Revetments. Revetments are flexible structures made of placed quarry stone designed to stop shoreline retreat and to protect landslide improvements from damages from wave action.

Sheetpile Walls. Sheetpile walls are steel or precast concrete panels vertically placed in the ground to form continuous seawalls for protecting backbeach improvements.

Breakwaters. The alternative structures, including offshore reefs or submerged breakwaters, would protect the shoreline against direct wave attack and reduce the transmitted wave energy to less damaging levels along the beach.

Separable Features

No separable feature is identified.

Secondary Features

Offshore Dredging. Offshore dredging will be required for the beachfill alternative. Since available offshore borrow sites exist, sand would be delivered to the beachfill sites using hopper dredges with pumpout or large cutter suction dredges. For the hopper dredge with pumpout, temporary nearshore pipeline and monobuoys would be positioned at about the 9 meter (30 foot) depth contour to permit the dredge to pump each load directly ashore. A hydraulic dredge with multiple booster pumps would pump material onshore through submerged and floating pipelines. However, this method becomes less preferred as distance offshore and depths increase, and the wave climate becomes more energetic.

Preliminary Plans

Preliminary plans are comprised of one or more management measures that survived the initial screening. The descriptions and results of the evaluations of the preliminary plans that were considered in this study are presented below.

Preliminary Plans Eliminated from Further Consideration

Due to potential environmental impacts and concerns related to nearshore recreational activities, breakwaters are not considered feasible.

Preliminary Plans for Further Consideration

A wide beach berm resulting from beachfill can effectively provide a buffer against storm wave attack, and improve recreational safety and opportunities significantly. Beachfill would address all of the problems and concerns. Revetments and sheetpile walls will effectively address storm damage concerns; however, they do not address beach recreation concerns. Among the viable structural alternatives revetments are the most economic measures. These preliminary alternatives will be considered and evaluated in the feasibility analysis.

Alternative Implementation Authorities

Alternatives or measures that cannot be implemented by the Corps of Engineers may qualify for implementation by other Federal agencies, or by State, County or local governmental agencies, or private interests.

Conclusions from the Preliminary Screening

The preliminary screening indicates that alternatives including beachfill, revetments, and sheetpile walls have the greatest potential for implementation.

Preliminary cost analysis suggests that beach nourishment would be the most costly alternative. The cost will depend on the sand volume required for reconstruction, the need for retention structures, and the frequency of renourishment. Revetments would be the least cost

alternative, but have limited benefits addressing problems associated with San Clemente's sand loss.

Establishment of a Plan Formulation Rationale

The conclusions from the preliminary screening form the basis for the next iteration of the planning steps that will be conducted in the feasibility phase. The likely array of alternatives that will be considered in the next iteration includes beachfill with and without retention structures, revetments, and sheetpile walls.

Future screening and reformulation will be based on the following factors:

1. Technical feasibility and effectiveness in meeting the planning objectives. Projects must be functional and complete, recognizing state-of-the-art design and construction methods.

2. Environmental impacts. Environmental acceptability must be ascertained and adverse impacts should be avoided if possible, or minimized if avoidance is not possible.

3. Economic justification in accordance with current guidelines and policies. Benefits must, at a minimum, equal the costs of a project. Ideally, benefits will clearly outweigh costs. The alternative with the greatest net benefits is selected as the National Economic Development Plan, and is generally selected as the Recommended Plan, unless there is an overriding reason to select another alternative.

4. Acceptability from the general public and the Non-Federal Sponsor.

Federal Interest

Since storm damage prevention is an output with a high budget priority, and preventing storm damages is the primary output of the alternatives to be evaluated in the feasibility phase, there is a strong Federal interest in conducting the feasibility study. Long term erosion can reasonably be expected to undermine and increase the flood potential of existing public and private structures along the San Clemente shoreline. As the width of the sandy beach decreases over time, winter storm damages will have a greater impact on the public transportation corridor and residential communities. Based on this information and on the preliminary screening of alternatives, there appears to be potential project alternatives that would be consistent with Corps of Engineers policies, costs, benefits, and environmental impacts.

Preliminary Financial Analysis

As the Non-Federal Sponsor, the City of San Clemente will be required to provide 50% of the cost of the feasibility phase. San Clemente is also aware of the cost sharing requirements for the potential project implementation. A letter of intent from the City of San Clemente stating willingness to pursue the feasibility phase and share in its cost, and an understanding of the cost sharing that is required for project construction is included as Attachment 2.

CITY OF
SAN CLEMENTE
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September 13, 2000

Colonel John P. Carroll
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, CA 90053-2325

Subject: San Clemente Shoreline - Feasibility Study

Dear Colonel Carroll:

The City of San Clemente supports the on-going efforts of the U.S. Army Corps of Engineers Reconnaissance Study on shore protection and beach nourishment improvements for the San Clemente Shoreline. At this time, the City of San Clemente is willing to support the recommended feasibility study that will further develop and evaluate the beach erosion problem.

The City of San Clemente has reviewed draft 905 (b) Report and Feasibility Cost Sharing Agreement (FCSA) and is interested in entering into a cost sharing agreement with the U.S. Army Corps of Engineers subject to final review and approval of the City Council. The City of San Clemente understands that a FCSA will have to be signed prior to initiating the feasibility study. The City of San Clemente also understands that typically a feasibility study must be cost-shared 50 percent federal and 50 percent non-federal, and of the 50 percent non-federal share, 50 percent can be in-kind services.

The City of San Clemente looks forward to working with the U.S. Army Corps of Engineers and with the Los Angeles District in completing the feasibility study and hopefully constructing the subsequent project.

If you have any questions, you can contact me at (949) 361-8322.

Sincerely,

Mike Parness
City Manager

Assumptions and Exceptions
Feasibility Phase Assumptions

The following critical assumptions will provide a basis for the feasibility study:

Without-Project Condition Assumptions. The beaches at San Clemente will continue to erode and more damages would occur to City's facilities and the railroad corridor. Public safety and tourism will also be negatively impacted.

Policy Exceptions and Streamlining Initiatives

The study will be conducted in accordance with the Principles and Guidelines and Corps of Engineers regulations. Approval of the Section 905(b) Analysis by HQUSACE will result in no policy exceptions or streamlining initiatives.

Other Approvals Required

This study is required to comply with EC 1105-2-407 which establishes the process and the requirements for certification of planning models. The Corps of Engineers Planning Models Improvement Program (PMIP) was established in 2003 to assess the state of planning models in the Corps and to make recommendations to assure that high quality methods and tools are available to enable informed decisions on investments in the Nation's water resources infrastructure and natural environment. The main objective of the PMIP is to carry out "a process to review, improve and validate analytical tools and models for U.S. Army Corps of Engineers (USACE) Civil Works business programs".

Current policy requires that any model used in the planning effort be certified. This policy applies to all models currently in use, under development, and new models. The primary criterion for model certification is technical soundness. Technical soundness reflects the ability of the model to represent or simulate the process and/or functions it is intended to represent.

Feasibility Phase Milestones

The Corps South Pacific Division uses specific review meetings and milestones to track the progress of the feasibility study. The milestones that will be used as checkpoints for this study are listed below:

MILESTONE NAME	DESCRIPTION
Initiate Feasibility Phase	**SPD Milestone F1** - This is the date the district receives Federal Feasibility phase study funds.
Feas Study Pub Wkshp (F2)	**SPD Milestone F2** – This is a Public Meeting/Workshop to inform the public and obtain input, public opinions and fulfill scoping requirements for NEPA purposes.
Feas Study Conf #1 (F3)	**SPD Milestone F3** – The Feasibility Scoping Meeting is with HQUSACE to address potential changes in the PMP.

	It will establish without project conditions and screen preliminary plans.
Feas Study Conf #2 (F4)	**SPD Milestone F4** – The Alternative Review Conference will evaluate the final plans, reach a consensus that the evaluations are adequate to select a plan, and prepare AFB issues.
Date of AFB	**SPD Milestone F4A** - Alternative Formulation Briefing (AFB) is for policy compliance review of the proposed plan with HQUSACE to identify actions required to prepare and release the draft report.
Public Review of Draft Report	**SPD Milestone F5** - Initiation of field level coordination of the draft report with concurrent submittal to HQUSACE through SPD for policy compliance review.
Final Public Meeting	**SPD Milestone F6** - Date of the final public meeting.
Feasibility Review Conference	**SPD Milestone F7** - Policy compliance review of the draft report with HQUSACE to identify actions that are required to complete the final report.
Feasibility Report w\NEPA	**SPD Milestone F8** - Date of submittal of final report package to CESPD-CM-P, including technical and legal certifications, compliance memorandum and other required documentation.
Division Commander's Report -Transmittal to HQ Civil	**SPD Milestone F9** - Date of transmittal of the Division Civil Commander's Report to HQUSACE to prepare for Civil Works Review Board.
HQ Civil Works Review Board Meeting	Both District and Division Commander's present the report conclusions and recommendations to the CWRB. This milestone is used as the completion of the Feasibility report in the Command Management Review (CMR) database. This milestone is a pre-cursor to the filing of the final EIS.
Filing of Final EIS	Date that the notice appears in the Federal Register. Letters for filing would be furnished by HQUSACE.
Chief's Report to ASA (CW)	Date of the signed report of the Chief of Engineers.
ROD Signed or FONSI Signed	Date that the ROD is signed by the ASA(CW) when forwarded for authorization.
President Signs Authorization	Date President signs authorizing legislation.

Feasibility Phase Cost Estimate

Description	Estimated Study Cost	Revised Total Estimated Study Cost
Programs and Project Management Division	$35,000	$256,000
Plan Formulation	$354,000	$898,000
Coastal Engineering	$415,000	$563,000
Geotechnical	$184,000	$326,000
Cost Engineering	$25,000	$62,000
Real Estate	$20,000	$40,000
Environmental	$345,000	$375,000
Cultural Resources	$25,000	$39,000
Economics	$163,000	$364,000
Public Affairs	$20,000	$23,000
ITR	$32,000	$103,000
In-Kind Services	$82,000	$152,000
	$1,700,000	**$3,201,000**

Views of Other Resource Agencies

Because of the funding and time constraints of the reconnaissance phase, only limited and informal coordination has been conducted with other resource agencies, and no significant information has been received at this time. However, it is anticipated that views from the California Department of Fish and Game, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, with regards to the beachfill alternative, will be included to prevent environmental impacts due to cross-shore sediment transport.

Potential Issues Affecting the Status of the Feasibility Phase

Continuation of this study is contingent upon an execution of a revised Feasibility Cost-Sharing Agreement (FCSA). With the revised FCSA an additional $1.1 million will increase the total study cost from $2.1 million to $3.2 million. There are two issues at this time that impact the continued implementation of the feasibility phase. First is the economic / coastal engineering model and second establishing a cost for construction of a seawall to protect the railroad tracks. The economic / coastal engineering model has been certified for use and is being refined based on revised information received for input and the seawall costs will be contracted out by the city

of San Clemente. Progress is being made on both issues and should be resolved before the F4 and AFB conferences.

Project Area Map

District Engineer's Recommendation

Colonel John P. Carroll, the District Engineer in 2000, recommended that the San Clemente Shoreline Feasibility Study proceed into the feasibility phase and signed his recommendation on 30 September 2000. The signed recommendation is on file and is not being included in this revision of the PMP.

CHAPTER 3 – WORK BREAKDOWN STRUCTURE

Levels of the Work Breakdown Structure

The work breakdown structure is divided into the following five levels.

Level 1. The Project

Level 2. The Subprojects are established by the phase that is appropriated by Congress – in this case the feasibility phase of the study. This level includes the major products generated in the feasibility phase: the Feasibility Report, the Project Management Plan and the PED Agreement, which are identified in the first character of the work breakdown structure code.

Level 3. The Parent Tasks are generally identified as separate products that go into the final feasibility phase documentation. Examples of these subprojects include such items as the real estate report, the coastal report, etc. These parent tasks are normally identified with the responsibility of a particular functional organization. This level is generally identified in the second and third characters of the work breakdown structure code.

Level 4. The Tasks are major separable elements of the subprojects that are keyed to separately identifiable products that are developed for the major special study milestones. These tasks are elements of work resulting in a deliverable product which have a beginning and an end, may be accomplished within one functional organization, can be described at a work order of detail and are the lowest level that will be specifically tracked with respect to cost and schedule. As an example, the cost estimates for the draft special study report would be an example of a task. Tasks can be described as the summation of activities that would be accomplished by a particular functional organizational between two of the milestone events. The milestone tasks and definitions are included above in the section called Feasibility Phase Milestones. The following durations between milestones are generally used for the establishment of tasks.

1. Between Milestone F1 and F3
2. Between Milestone F3 and F4
3. Between Milestone F4 and F4A
4. Between Milestone F4A and F5
5. Between Milestone F5 and F8
6. Between Milestone F8 and F9

Level 5. The Activities are separate elements of work that are managed by the functional managers to whom the tasks are assigned and which may not necessary result in a deliverable work product to another organization. These activities are not tracked separately in terms of cost

and schedule but are described in the scopes of work to the extent required to provide a clear understanding of the work required.

Listing of Tasks - Work Breakdown Structure

In accordance with the levels above, the following work breakdown structure indicates subprojects and parent tasks in bold type, followed by the subordinate tasks.

Description
Feasibility Report (Feas)
Milestones
Initiate Feasibility Phase (F1)
Feas Study Pub Wkshp (F2)
Feas Study Conf #1 (F3)
Feas Study Conf #2 (F4)
Date of AFB
Public Review of Draft Report
Final Public Meeting
Feasibility Review Conference
Feasibility Report w/NEPA
MSC Commander's Public Notice
Filing of Final EIS/EA
Chief's Report to ASA (CW)
ROD Signed or FONSI Signed
President Signs Authorization
Engineering Appendix
Feas – Surveys and Mapping except Real Estate
Surveys and Mapping – Without Project Conditions
Mapping – With Project Conditions
Mapping – AFB Documentation
Mapping – Draft Report
Mapping – Final Report
Feas – Hydrology and Hydraulics Studies/Report (Coastal)
H&H – Without Project Conditions and Preliminary Plans
H&H – With Project Conditions for Final Plans
H&H – AFB Documentation
H&H – Draft Report
H&H – Final Report
Feas – Geotechnical Studies/Report
Geotech – Without Project Conditions and Preliminary Plans
Geotech – With Project Conditions for Final Plans
Geotech – AFB Documentation
Geotech – Draft Report
Geotech – Final Report
Feas – Engineering and Design Analysis/Report
Engr & Design – Without Project Conditions & Preliminary Plans
Engr & Design – With Project Conditions for Final Plans
Engr & Design – AFB Documentation

Engr & Design – Draft Report
Engr & Design – Final Report
Feas – Socioeconomic Studies
Socioecon – Without Project Conditions & Preliminary Plans
Socioecon – With Project Conditions for Final Plans
Socioecon – AFB Documentation
Socioecon – Draft Report
Socioecon – Final Report
Feas – Real Estate Analysis/Report
Real Estate – Without Project Conditions & Preliminary Plans
Real Estate – With Project Conditions for Final Plans
Real Estate – AFB Documentation
Real Estate – Draft Report
Real Estate – Final Report
Feas – Environmental Studies/Report (Except USF&WL)
Environ – Without Project Conditions & Preliminary Plans
Environ – With Project Conditions for Final Plans
Environ – AFB Documentation
Environ – Draft Report/EIS
Environ – Final Report/EIS
Feas – Fish and Wildlife Coordination Act Report (CAR)
USFWS – Planning Aid Letter
USFWS – Draft Coordination Act Report
USFWS – Final Coordination Act Report
Feas – HTRW Studies/Report
HTRW – Without Project Conditions & Preliminary Plans
HTRW – With Project Conditions for Final Plans
HTRW – AFB Documentation
HTRW – Draft Report
HTRW – Final Report
Feas – Cultural Resources Studies/Report
Cultural – Without Project Conditions & Preliminary Plans
Cultural – With Project Conditions for Final Plans
Cultural – AFB Documentation
Cultural – Draft Report
Cultural – Final Report
Feas – Cost Estimates
Cost Estimates – Without Project Conditions & Preliminary Plans
Cost Estimates – With Project Conditions for Final Plans
Cost Estimates – AFB Documentation
Cost Estimates – Draft Report
Cost Estimates – Final Report
Feas – Public Involvement Documents
Initial Public Meeting/NEPA Scoping
Public Workshops in Support of Plan Selection
Public Involvement Support to AFB
Final Public Meeting
Public Involvement Support to FRC
Feas – Plan Formulation and Evaluation

Plan Formulation of Preliminary Plans
Plan Formulation for Final Plans
Plan Formulation – AFB Documentation
Plan Formulation – Draft Report
Plan Formulation – Final Report
Plan Formulation – Support to Division Commander's Notice
Feas – Final Report Documentation
Reproduction and Distribution of F3 Documentation
Reproduction and Distribution of F4 Documentation
Reproduction and Distribution of AFB Documentation
Reproduction and Distribution of Draft Report
Reproduction and Distribution of Final Report
Feas – Technical Review Documents
Independent Technical Review - F3 Documentation
Independent Technical Review - F4 Documentation
Independent Technical Review - AFB Documentation
Independent Technical Review - Draft Report
Independent Technical Review - Final Report
Feas – Washington Level Report Approval (Review Support)
Feas – Management Documents
Project Management and Budget Documents
Programs and Project Management to F3 Milestone
Programs and Project Management to F4 Milestone
Programs and Project Management – AFB Documentation
Programs and Project Management – Draft Report
Programs and Project Management – Final Report
Programs and Project Management – DE's Notice
Supervision and Administration
S&A – Planning Division
S&A – Engineering Division
S&A – Real Estate Division
S&A – PPMD
S&A – Contracting Division
Contingencies
Project Management Plan (PMP)
PMP – Draft PMP
PMP – Final PMP
PED Cost Sharing Agreement

CHAPTER 4 – SCOPES OF WORK

Detailed Scopes of Work

For each task that is included in the work breakdown structure, a scope of work is developed that describes the work that is to be performed. For each task, the scope describes the work, including specific activities, to be accomplished in narrative form. The scopes of work have been developed by the study team, which includes representatives of the City of San

Clemente. The scopes also reflect the policy exceptions and streamlining initiatives that have been approved in the Section 905(b) Analysis. The detailed scopes of work for the feasibility study are organized by parent task in Enclosure A.

Durations of Tasks

The durations for the tasks are entered into the project's network analysis system (NAS) to develop the schedule that is included in Chapter 6 – Feasibility Study Schedule. The durations are based on negotiations between the Project Manager and the chiefs of the responsible organizations, as identified in Chapter 5 – Responsibility Assignment.

Costs of Tasks

Lastly, the scopes of work for the tasks are grouped by the parent tasks that they support. The total estimates for the parent tasks are then combined in the Feasibility Cost Estimate – Chapter 7. The cost estimates for the tasks are also based on negotiations between the Project Manager and the chiefs of the responsible organizations.

CHAPTER 5 – RESPONSIBILITY ASSIGNMENT

Organizational Breakdown Structure

The scopes of work represent agreements between the Project Manager and first line supervisors of functional organizations. The functions of these organizations in support of the project are defined by the work that is assigned. All organizations responsible for tasks, including the City of San Clemente and other agencies, are included with their organization codes in the following Organizational Breakdown Structure (OBS).

Organization	Org Code
Los Angeles District	
Planning/Coastal Studies Group	CESPL-PD-WS
Planning/Economics & Social Analysis Group	CESPL-PD-E
Planning/Ecosystem Planning Section	CESPL-PD-RN
Engineering/Coastal Engineering Section	CESPL-ED-DC
Engineering/Geology & Investigations Section	CESPL-ED-GG
Engineering/Soils Design & Materials Section	CESPL-ED-GD
Engineering/Survey & Mapping Section	CESPL-ED-GS
Engineering/Cost Engineering Unit	CESPL-ED-CE
Real Estate/Acquisitions Section	CESPL-RE-A
PPMD/Civil Projects Branch	CESPL-PM-C
Non-Federal Sponsor	
City of San Clemente	
Other Agencies/Other Corps	
US Fish and Wildlife Service	USFWL

Responsibility Assignment Matrix

The scopes for each task are grouped by the parent task that they support and the primary responsible organization for each parent task is identified by the organization codes in the following Responsibility Assignment Matrix (RAM).

WBS#	Description	District Org	Non-Fed	Other
JAA00	Feas - Surveys and Mapping except Real Estate	CESPL-ED-GS		
JAB00	Feas – Hydrology and Hydraulics Studies/Report (Coastal)	CESPL-ED-DC		
JAC00	Feas - Geotechnical Studies/Report	CESPL-ED-GG		
JAE00	Feas - Engineering and Design Analysis/Report	CESPL-ED-DC		
JB000	Feas - Socioeconomic Studies	CESPL-PD-E		
JC000	Feas - Real Estate Analysis/Report	CESPL-RE-A		
JD000	Feas - Environmental Studies/Report (Except USF&WL)	CESPL-PD-RN		
JE000	Feas - Fish and Wildlife Coordination Act Report			USFWL
JF000	Feas - HTRW Studies/Report	CESPL-PD-RN		
JG000	Feas - Cultural Resources Studies/Report	CESPL-PD-RN		
JH000	Feas - Cost Estimates	CESPL-ED-CE		
JI000	Feas - Public Involvement Documents	CESPL-PD-WS		
JJ000	Feas - Plan Formulation and Evaluation	CESPL-PD-WS		
JL000	Feas - Final Report Documentation	CESPL-PD-WS		
JLD00	Feas - Technical Review Documents	CESPL-PD-WS		
JM000	Feas - Washington Level Report Approval (Review Support)	CESPL-PD-WS		
JPA00	Project Management and Budget Documents	CESPL-PM-C		
JPB00	Supervision and Administration	All		
JBC00	Contingencies	Not Assigned		
L0000	Project Management Plan (PMP)	CESPL-PD-WS		
Q0000	PED Cost Sharing Agreement	CESPL-PD-WS		

CHAPTER 6 – FEASIBILITY STUDY SCHEDULE

Schedule Development

All schedules are developed using a Network Analysis System (NAS). The network is based upon the tasks that are listed in Chapter 3 – Work Breakdown Structure and the durations that are included in the detailed scopes of work in Enclosure A – Detailed Scopes of Work. Major milestones that are defined in Chapter 2, Feasibility Phase Milestones Section are also included in the schedules.

Funding Constraints

Funding for the feasibility study is can limiting based on congressional allocations each fiscal year, this constraint has been reflected in the development of the study schedule. Following the first year, an optimum schedule based upon unconstrained funding has been assumed for subsequent Fiscal Years. However, congressional support is a key element in maintaining project funding.

Non-Federal Sponsor Commitments

Milestones become commitments when the project manager meets with the Non-Federal Sponsor, the City of San Clemente, at the beginning of each Fiscal Year and identifies two to five tasks that are important for the Los Angeles District to complete during the Fiscal Year. These commitments will be flagged in the PROMIS database and monitored and reported on accordingly.

Uncertainties in the Schedule

Because of the limited evaluations in the reconnaissance phase, the schedule must make appropriate allowances for uncertainty. For example, additional time may be required in years when full funding is not received and sufficient time may not have been allotted in the schedule for resolving draft report comments.

Milestone Schedule

The schedule for the completion of the San Clemente Shoreline Feasibility Study milestones in the CESPD Milestone System is as follows:

Milestone	Description	Date
F1	Initiate Feasibility Phase	March 2000 *
F2	Feasibility Public Workshop	January 2002 *
F3	Feasibility Scoping Meeting	December 2004*
F4	Alternative Review Conference	June 2007
F4A	Alternative Formulation Briefing (AFB)	Oct 2007
F5	Public Review of Draft Document	January 2008
F6	Final Public Meeting	March 2008
F7	Feasibility Review Conference	April 2008
F8	Feasibility Report w/NEPA	May 2008
F9	Division Commander's Report Transmittal to HQ Civil	June 2008
	HQ Civil Works Review Board Meeting	July 2008
	ROD Signed or FONSI Signed	August 2008
	Chief's Report to ASA (CW)	September 2008
	President Signs Authorization	October 2008

* indicates that task has been completed.

CHAPTER 7 – FEASIBILITY COST ESTIMATE

Basis for the Cost Estimate

The feasibility cost estimate is based upon a summation of the costs that were identified for the individual tasks in detailed scopes of work that are included in Enclosure A – Detailed Scopes of Work. Study cost estimates include allowances for inflation so that the City of San Clemente is fully aware of its financial commitment.

Appropriate contingencies and contingency management are included to adequately deal with the uncertainty in the elements of the study. Experience has shown that approximately 20% of the study costs should be reserved for activities following the release of the draft report. Contingencies in the amounts required to cover the costs of these activities have been added to the cost estimate.

Costs for Federal and Non-Federal Activities

The City of San Clemente must contribute 50% of the cost of the study during the period of the study. Not more than one-half of the Non-Federal share may be made through the provision of services, materials, supplies or other in-kind services necessary to complete the

study and prepare the feasibility report. The following feasibility cost estimate includes credit for work that is to be accomplished by the City of San Clemente.

Summary of Costs

Description	Federal Original	Federal Revised	Non-Federal Original	Non-Federal revised	Total Estimated Study Cost Original	Total Estimated Revised Study Cost
PPMD	$20,000	$150,000	$15,000	$106,000	$35,000	$256,000
Plan Formulation	$199,000	$650,000	$155,000	$248,000	$354,000	$898,000
Coastal Engineering	$220,000	$225,000	$195,000	$338,000	$415,000	$563,000
Geotechnical	$92,000	$90,000	$92,000	$236,000	$184,000	$326,000
Cost Engineering	$12,500	$35,000	$12,500	$27,000	$25,000	$62,000
Real Estate	$10,000	$15,500	$10,000	$24,500	$20,000	$40,000
Environmental	$172,500	$150,000	$172,500	$225,000	$345,000	$375,000
Cultural Resources	$12,500	$20,000	$12,500	$19,000	$25,000	$39,000
Economics	$81,500	$200,000	$81,500	$164,000	$163,000	$364,000
Public Affairs	$18,500	$15,000	$13,500	$8,000	$32,000	$23,000
ITR	$10,000	$50,000	$10,000	$53,000	$20,000	$103,000
In-Kind Services			$82,000	$152,000		$152,000
	$848,500	$1,600,500	$769,500	$1,600,500	$1,700,000	**$3,201,000**

CHAPTER 8 – QUALITY CONTROL PLAN

Quality Control Plan Objective

The quality control objective is to achieve feasibility phase documents and services that meet or exceed customer requirements, and are consistent with Corps of Engineers policies and regulations.

Guidelines Followed For Technical Review

The guidelines for independent technical review are set forth in the South Pacific Division Quality Management Plan, CESPD R 1110-1-8, and in the corresponding Los Angeles District Quality Management Plan.

San Clemente Shoreline Feasibility Study Team

Organization/Function	Name/Title	Address	Telephone
Planning Division Coastal Studies Group	Joseph A. Johnson Coastal Planner	915 Wilshire Blvd Los Angeles CA 90017	213/452-3829
Engineering Division Coastal Engineering Sect.	Chuck Mesa Coastal Engineer	915 Wilshire Blvd Los Angeles CA 90017	213/452-3678
Planning Division Environmental Policy Grp	Tom Keeney Environmental Coordinator/Biologist	915 Wilshire Blvd Los Angeles CA 90017	213/452-3875
Planning Div, Economics & Social Analysis Grp	Joseph Lamb Economist	915 Wilshire Blvd Los Angeles CA 90017	213/452-3819
Programs & Project Mgmt Div, Project Mgmt Br	Eshan Eshraghi Project Manager	915 Wilshire Blvd Los Angeles CA 90017	213/452-4013
Programs & Project Mgmt Div, Project Mgmt Br	Angela Fuller Budget Analyst	915 Wilshire Blvd Los Angeles CA 90017	213/452-4038
Programs & Project Mgmt Div, Project Mgmt Br	Lety Zarate Scheduler	915 Wilshire Blvd Los Angeles CA 90017	213/452-4000
Resource Mgmt Division	Sue Loo Resource Manager	915 Wilshire Blvd Los Angeles CA 90017	213/452-3274
Real Estate Division	Pete Garcia Real Estate Specialist	915 Wilshire Blvd Los Angeles CA 90017	213/452-3131
Engineering Division , Cost Engineering Section	Juan Dominguez Cost Estimator	915 Wilshire Blvd Los Angeles CA 90017	213/452-3737
Engineering Division, Geology Section	Bob Walker Geologist	915 Wilshire Blvd Los Angeles CA 90017	213/452-3579

San Clemente Shoreline Feasibility Study Technical Review Team

Organization/Function	Name/Title
San Francisco District (SPN) Planning Division, Plan Formulation	Eric Thaut Team Leader
SPN Engineering Division, Coastal Engineering/Coastal Processes	Craig Conner Coastal Engineer
SPN Planning Division, Environmental Resources	Chris Eng Environmental Manager
SPN Planning Division, Economics & Social Analysis Group	Kevin Knight Economist
SPN Engineering Division, Geology Section	Paul Hecht Geologist

Documents to be Reviewed and the Schedule for Review Activities

All of the products of the tasks listed in the detailed scopes of work in Enclosure A – Detailed Scopes of Work, will be subject to independent technical review. Seamless Single Discipline Review will be accomplished prior to the release of materials to other members of the study team or integrated into the overall study. Section chiefs shall be responsible for accuracy of the computations through design checks and other internal procedures, prior to the independent technical review.

Independent product review will occur prior to major decision points in the planning process at the CESPD milestones so that the technical results can be relied upon in setting the course for further study. These products would include documentation for the CESPD mandatory milestone conferences (F3 & F4), HQUSACE issue resolution conferences (AFB & FRC) and

the draft and final reports. These products shall be essentially complete before review is undertaken. Since this quality control will have occurred prior to each milestone conference, the conference is free to address critical outstanding issues and set direction for the next step of the study, since a firm technical basis for making decisions will have already been established. In general, the independent technical review will be initiated at least two weeks prior to a CESPD mandatory milestone conference and at least two weeks prior to the submission of documentation for a HQUSACE issue resolution conference.

For products that are developed under contract, the contractor will be responsible for quality control through an independent technical review. Quality assurance of the contractor's quality control will be the responsibility of the Los Angeles District.

Deviations from the Approved Quality Management Plan

At this time, no deviations from the approved quality management plan have been approved by the South Pacific Division for this study.

Cost Estimate for Quality Management

The costs for conducting independent technical review are included with the individual scopes of work in Enclosure A - Detailed Scopes of Work. Quality management activities of Branch and Division Chiefs are included in Supervision and Administration. The total cost for quality management is approximately $103,000, which is approximately 3% of the study cost estimate.

PMP Quality Certification

The Chief, Planning Division has certified that 1) the independent technical review process for this PMP has been completed, 2) all issues have been addressed, 3) the streamlining initiatives proposed in this PMP will result in a technically adequate product, and 4) appropriate quality control plan requirements have been adequately incorporated into this PMP. The signed certification is included as Enclosure B.

Feasibility Phase Certification

The documentation of the independent technical review shall be included with the submission of the reports to CESPD. Documentation of the independent technical review shall be accompanied by a certification, indicating that the independent technical review process has been completed and that all technical issues have been resolved. The certification requirement applies to all documentation that will be forwarded to either CESPD or HQUSACE for review or approval. The Chief, Planning Division will certify the pre-conference documentation for the HQUSACE Issue Resolution Conferences and the Draft Feasibility Report. The Final Feasibility Report, to include the District Commander's signed recommendation, will be certified by the District Commander.

Evolution of the PMP

The Project Management Plan describes all activities from the initial tasks of the feasibility phase study through the preparation of the final feasibility report, the Project Management Plan and PED cost-sharing agreement, and the Los Angeles District's support during the Washington-level review. As the PMP is based primarily on existing information, it will be subject to scope changes as the technical picture unfolds. Because of the limited evaluations during the reconnaissance phase study, the PMP will include significantly more uncertainty and must make appropriate allowances. As an example, this PMP assumes the requirement for an Environmental Impact Statement, because of the limited environmental evaluations conducted in the reconnaissance phase.

Use of the PMP

The current PMP, including the documentation of agreements on changes to the conduct of the study, will be addressed at each of the CESPD milestone conferences and at the formal Issue Resolution Conferences with HQUSACE, including the Alternative Formulation Briefing and Feasibility Review Conference.

The Planning Process

The Water Resource Council's Principles and Guidelines is the basic planning guidance, which establishes a six-step planning process. This process is a conceptual planning sequence for developing solutions to water resource problems and opportunities. The Planning Manual and Planning Primer, both published by the Corps of Engineers' Institute for Water Resources, provide excellent coverage of the planning process. The South Pacific Division also provides training in the six-step process.

Policy

The policies that govern the development of projects are contained in the *Digest of Water Resources Policies and Authorities, EP 1165-2-1*.

Corps of Engineers Regulations

Corps of Engineers regulations are available on the HQUSACE Internet Web Site. The most important of these regulations is *ER 1105-2-100, Planning Guidance*. Policy compliance review is addressed in *EC 1165-2-203, Technical and Policy Compliance Review*, and, quality control is covered in the *CESPD Quality Management Plan, CESPD R 1110-1-8*. The review of the feasibility study products will be accomplished with the review checklist provided in EC 1165-2-203 as *Appendix B, Policy Compliance Review Considerations*.

Processing Requirements

In addition to ER 1105-2-100, the South Pacific Division has provided additional guidance on the processing requirements for each of the milestone submittals. This guidance is

contained in *CESPD-ET-P Memorandum, Processing of Planning Reports in the South Pacific Division*, dated June 5, 2000.

CHAPTER 10 – PUBLIC INVOLVEMENT AND COORDINATION

Major Milestones

Two of the milestones in the CESPD milestone system have been established specifically for the purpose of providing public forums for public review and to receive public comment and input. The first of these is the initial public workshop. This workshop is an opportunity to present the study to the public, obtain input and public opinions, and fulfill NEPA scoping requirements. The second milestone in the system is the final public meeting which is scheduled following the release of the draft report for public review. This meeting provides the opportunity to present the findings of the feasibility study and the draft report to the public and to receive public comment.

Public Involvement-Coordination Program

Many public laws, executive orders, Federal agency regulations and the Water Resources Council's Principles and Guidelines require that public involvement and coordination be applied to water resources planning activities. The Corps of Engineers (COE) is required to coordinate with State agencies and the Governor or his designated agency, interested and affected agencies at all levels, and public and private groups and individuals. This commitment is to the broadest possible array of publics - to include any person, group or agency that is not the COE. The importance of public involvement and coordination in COE planning efforts makes it practical to consider that the public includes any individual interested in the study, in effect, anyone not on the study team.

Purposes and Objectives

The purpose of public involvement and coordination is to ensure that Corps of Engineers planning is responsive to the needs and concerns of the public, and to involve all interested parties in the planning decision-making process. Its objectives are 1) to provide information about COE activities and proposed actions to the public; 2) make public desires, needs, and concerns available to the decision-makers; 3) provide for adequate interaction with the public before decisions are made, and 4) to adequately account for the views of the public in making decisions. However, these purposes and objectives must be achieved within a framework where the Corps of Engineers cannot relinquish its legislated responsibilities for decision-making.

Public involvement and coordination actions must not only be utilized to inform the public; they must also actively seek public responses in regard to needs, values, ideas for solutions, and, very significantly, reactions to proposed solutions. Public involvement and coordination must be a two-way communications process, and it must provide people from diverse backgrounds and interests with multiple opportunities to ask questions and offer suggestions.

Public involvement and coordination helps reduce conflict and achieve consensus. Consensus sometimes occurs spontaneously even when the conflict does not appear to be

resolvable. Conflict management techniques should be incorporated into public involvement and coordination activities.

Public Involvement Planning

Public Involvement planning will be incorporated as a significant part of the overall planning process. It will be developed and implemented as the feasibility phase of the study progresses. Public involvement and coordination must be a dynamic process, capable of taking into account changes in the plan formulation process and public attitudes and reactions, and making adjustments to handle these unforeseen occurrences. Every member of the planning team should be prepared to provide input to the public involvement and coordination program, as well as to represent the planning effort in the achievement of public involvement goals.

Representatives of the Non-Federal Sponsor, the City of San Clemente, are perhaps the most important players in this element of the planning process. They know the study area and the attitudes and issues surrounding the problems and their solution. They also are familiar with the individuals and organizations that are familiar with the study area and the forces surrounding community attitudes and reactions, which are significant to the planning effort.

Another resource that should not be overlooked for participation in public involvement/coordination planning and implementation is the Los Angeles District's Public Affairs Office. They can provide valuable insight and assistance in the public information effort, which is the important front-end information-out element of any successful public involvement/coordination plan. The Chief of Public Affairs and the staff members possess knowledge of the public communications media, which serves the study area, and influences the attitudes and reactions of the affected individuals and organizations with an interest in the study and its outcome. A successful public information effort can vastly influence the attainment of public involvement/coordination program objectives.

Public Involvement-Coordination Elements

All available means of reaching the many publics affected by and interested in the San Clemente Shoreline Feasibility Study should be developed and utilized if the Study Team is to be successful in accomplishing the study purposes and objectives. The following listing of available resources and methods should be developed and used as appropriate during the progress of the study:

Public Communications Media. Newspapers, radio and television stations, magazines and newsletters, and other media distributed by interested and affected study publics should be used whenever possible to distribute information and serve as a conduit for input and comment. News releases issued whenever appropriate can serve well in informing all affected publics of study activities and progress.

Meetings. There are a variety of meetings that must be effectively utilized in the successful achievement of public involvement/coordination objectives. The most important and visible meetings are the formal public meetings, which are scheduled by directive at the initiation of the feasibility phase study, and near the end of the study as part of the public review of the draft feasibility report and the study findings. Public comment and input are vital to finalizing the

feasibility report and completing the study. These meetings include public meetings, open meetings with interest groups, workshops, and any other opportunities to distribute information regarding the study and progress to generate public input.

Publications. Reports, brochures, newsletters and information bulletins can be prepared and distributed at appropriate points throughout the study process. These publications could be distributed after the definition of problems and opportunities, when preliminary alternatives have been formulated, or when the effects or impacts of alternatives have been identified.

Mailing Lists. Mailing lists are listed last on this preliminary itemization of public involvement-coordination elements to emphasize their importance to the program. They should be among the first public involvement actions, because they are key to the successful accomplishment of program objectives, and will be utilized throughout the conduct of the study.

ENCLOSURE A: DETAILED SCOPES OF WORK

Milestones

The following is a more detailed description of the milestones. The milestones are provided as a way to schedule and monitor the expected deliverables throughout the entirety of the feasibility phase of the project. The milestones are scoped to allow adequate time to properly review all project alternatives from an engineering, environmental, and economic standpoint. A more condensed version of the milestones is presented in Chapter 2.

Initiate Feasibility Phase (F1): This is the date that the district receives Federal feasibility phase study funds; thereby, allowing the initiation of the feasibility phase of the study.

Feasibility Study Public Workshop (F2): This milestone has been implemented to conduct a Public Meeting/Workshop to inform the public of the impending project study and management plan. In addition, this forum allows planning managers to obtain public opinion and input. It also fulfills the scooping requirements for National Environmental Policy Act (NEPA) purposes.

Feasibility Study Scoping Conference (F3): This is the first Feasibility Scoping Meeting with Headquarters (HQUSACE) to address potential changes in the Project Management Plan. In addition, this meeting establishes the without project conditions and the preliminary discussions on screening preliminary plans.

Feasibility Study Alternative Review Conference (F4): This conference is the second South Pacific Division mandatory milestone conference. The purpose of the conference is to screen the final plans in order to reach a cumulative opinion that the evaluations are adequate to select a plan and identify potential issues for the Alternative Formulation Briefing.

The Alternative Formulation Briefing (AFB) (F4A): The goal of the AFB process is to obtain Headquarters approval to prepare the draft report and release it for public review concurrent with forwarding the draft to Headquarters. The AFB will be held in accordance with the instructions in Appendix O of ER 1105-2-100. The AFB includes participation by Headquarters and will be chaired by the South Pacific Division's Chief, Planning Division, or the Division's planning

program manager on behalf of the Chief, Planning Division. The planning program manager will facilitate informal coordination with Headquarters and the district to finalize the final memorandum for the AFB and will be signed at Headquarters approximately 10 days after the conference. Upon receipt of the signed memorandum from Headquarters, the planning program manager will endorse the memorandum to the district.

Public Review of Draft Report (F5): This is the initiation of field level coordination of the draft report with a concurrent submittal to the HQUSACE through the South Pacific Division for policy compliance and review.

Final Public Meeting (F6): This is the date of the final public meeting to review changes to the original streamlining initiatives and alterations to the project management plan. This task is not required to be included in milestone submissions.

Feasibility Review Conference (FRC) (F7): The purpose of the FRC is to resolve outstanding policy issues that were raised in the Headquarters review of the draft report and identify actions that are required to complete the final report. The FRC includes participation by Headquarters and will be chaired by the South Pacific Division Chief, Planning Division, or the planning program manager on behalf of the Chief, Planning Division.

Feasibility Report w/NEPA (F8): This is the date of submittal of the final report package to the South Pacific Division (CESPD-CM-P). The final report package will include all technical and legal certifications, compliance memorandums, and other required documentations.

Division Commander's Report and Transmittal to HQ Civil (F9): This is the date of issue of the Division Commander's Report to HQUSACE to prepare for the Civil Works Review Board (CWRB).

HQ Civil Works Review Board Meeting: At this meeting both the District and the Division Commander present the report conclusions and recommendations to the CWRB. This milestone is used as the completion of the feasibility report in the Command Management Review (CMR) database and is a precursor to the filing of the final EIS.

Final Filing of the EIS: This is the date that the notice appears in the Federal Register. The letters for filing would be furnished by HQUSACE.

Chief's Report to ASA (CW): This is the date of the signed report of the Chief of Engineers.

ROD Signed or FONSI Signed: This is the date that the ROD is signed by the ASA (CW) when forwarded for authorization.

President Signs Authorization: This is the date that the president signs the feasibility report authorizing legislation.

Coastal Engineering

The effort included under this task involves surveys and mapping except surveys and mapping specific to real estate or geotechnical work.

This parent task will include reviewing existing data in conjunction with field survey investigations to obtain updated beach profile surveys and to produce a detailed map outlining the existing topography of the study area. The resulting information will be used to evaluate shoreline and volumetric changes, littoral transport, and beachfill requirements. A report will be prepared presenting the updated beach profile survey data and the topographic mapping of the region.

This task will include reviewing existing data in conjunction with field survey investigations to obtain updated beach profile surveys and to produce a detailed map outlining the existing topography of the study area. The resulting information will be used to evaluate shoreline and volumetric changes, littoral transport, and beachfill requirements. A report will be prepared presenting the updated beach profile survey data and the topographic mapping of the region.

Surveys and Mapping – Beach Profile Surveys

Existing baseline conditions will be determined through beach profile survey field investigations. Approximately 5 transect lines spaced about 1000 feet apart, spanning from Mariposa Street to Cristobal Street in San Clemente, will be surveyed. Two of the surveyed transect lines will be in line with previous transects conducted during the CCSTWS study for the San Diego Region (SC 1680 and SC 1660) to enhance data replication. The data obtained will be reduced and analyzed for further coastal processes investigation.

Surveys and Mapping – Topographic Mapping

A detailed topographic map of the study area will be developed in order to assist in the determination of the without project baseline conditions and to provide a base map for the evaluation of any proposed alternatives. A draft report outlining the data collections and the results of the surveys and mapping field investigations will be submitted for further review. Upon the completion of the review of the draft report, the final revision will be made to the document allowing for the preparation of the final report.

Coastal Engineering

This task will include a data-collection review encompassing all available pertinent data research and reported findings within the project area. The without project baseline conditions will be determined through the assessment of the local nearshore coastal processes, beach erosion analysis, and the prediction of storm damage potentials. These findings will provide the basis for the scope of the Alternative Formulation Briefing (AFB) documentation. A final report will be prepared presenting the results of the coastal studies analysis including concerns voiced during the AFB documentation phase.

This task will include the collection and analysis of all previous data research and reported findings pertaining to the study area. The crux of previous information will be obtained from the CCSTWS San Diego Region study. The existing data will be reviewed and will eventually determine the scope of complimentary field investigations necessary to successfully perform the remaining tasks of the Coastal Studies/Report parent task.

This task will provide a detailed insight into the existing coastal conditions within the project area and will represent the crux of information necessary in formulating applicable plan alternatives. Alongshore and cross-shore littoral transport investigations will be conducted through the evaluation of beach profile surveys to determine the historic and recent shoreline and volumetric changes, which will aid in erosion rate assessments and wave runup analysis.

Coastal Engineering– Beach Erosion Analysis

This task will be conducted to determine the relative erosion rates within the project area. This will be completed through detailed engineering analysis of the data obtained through the surveys and mapping task and the coastal processes assessment conducted in the coastal study task. The results will be beneficial in the design of alternative plans.

Coastal Engineering– Storm Damage Potentials

A numerical model depicting the wave run up and the short term beach erosion rates along the San Clemente shoreline will be simulated for storms of varying episodic return periods. The model will be run to predict potential storm erosion and structural damages for without project baseline conditions. The results of which will be compiled and compared to future storm damage predictions with project conditions to properly assess the benefits of the alternative plans.

The results of the Coastal Studies/Report parent task will be discussed formally with the federal and the City of San Clemente to evaluate the findings of the task and to provide a working dialog to streamline the results presented in the draft report.

The data and resultant analysis obtained in conjunction with AFB coordination will be presented in a draft report outlining the findings of each coastal studies task. The report will then be submitted for further review.

Upon the completion of the review of the draft report, final adjustments will be made to the document allowing for the preparation of the final report.

Engineering and Design Analysis Report

This parent task work includes the design and engineering evaluations of the plan alternative formulations. This will consist of the review of existing baseline conditions including coastal hydrodynamics, littoral processes, and storm damage potential outlined during the coastal studies parent task. Design effects shall also consider both physical and environmental impacts to adjacent beaches. The basis for design will include drawings displaying the plan and structural details. The work will include field investigations and coordination with the City of San Clemente regarding design considerations and will be attended to in the AFB documentation. A final report will be prepared presenting the results of the engineering and design analysis phase including concerns voiced during the AFB documentation. In addition, details of the work will be addressed in a design appendix accompanying the feasibility report.

Alternative Plan Formulations & Evaluations of Alternative Plans

This task will include the assimilation of all data acquisitions and evaluations to provide the basis for the development of alternative measures. Several alternatives outlined in the Section

905(b) (WRDA) Analysis warranting further investigation include beach nourishment with and without retention structures, and potential protective armoring solutions, such as revetments, sheet pile walls, and breakwaters. Designs and specifications of each alternative will be presented along with drawings displaying the plan and structural details.

Each alternative plan formulation will be subjected to a rigorous engineering evaluation to determine the applicability of the proposed alternatives. Potential performance of the alternative plans will be predicted through numerical model simulations. For the beach nourishment alternative, single-line numerical simulations shall be conducted to determine the dispersion effect of various sand placement options.

The results of the Engineering and Design Analysis Report parent task will be discussed formally with the federal and the City of San Clemente to evaluate the findings of the task and to provide a working dialog to streamline the results presented in the draft report.

Upon the completion of the review of the draft report, final adjustments will be made to the document allowing for the preparation of the final report.

The following table is a detailed time and cost estimate for Coastal Engineering by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared: 5-May-2006**

Engineering Division - Coastal Engineering — **By: Art Shak/Chuck Mesa**

San Clemente Shoreline Feasibility Study

Feasibiliy Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
F-3	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Analyze shoreline processes, development of coastal/economic analytical model, prepare draft report	245	$245,000	$24,500	$12,250	$281,750		
2	Sidescan/Profile Contract	0	$0	$0	$0	$71,482		
	Subtotal	**245**	**$245,000**	**$24,500**	**$12,250**	**$353,232**	**$0**	**$353,000**
F-4	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Evaluate preliminary plans, sections, and details	35	$35,000	$3,500	$1,750	$40,250	$5,000	
2	Meetings, conferences, review, coordination	5	$5,000	$500	$250	$5,750		
	Subtotal	**40**	**$40,000**	**$4,000**	**$2,000**	**$46,000**	**$5,000**	**$51,000**
F-5	**F-4 Milestone to Public Draft Report**							
1	Physical impacts evaluation, model simulation, report preperation, monitoring plan	90	$90,000	$9,000	$4,500	$103,500	$2,500	
2	Meetings, conferences, review, coordination	5	$5,000	$500	$250	$5,750		
	Subtotal	**95**	**$95,000**	**$9,500**	**$4,750**	**$109,250**	**$2,500**	**$112,000**
F-8	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Respond to comments	20	$20,000	$2,000	$1,000	$23,000		
2	Meetings, conferences, review, coordination	10	$10,000	$1,000	$500	$11,500		
	Subtotal	**30**	**$30,000**	**$3,000**	**$1,500**	**$34,500**	**$0**	**$35,000**
HQ	**Final Report Processing (to Chief's Report)**							
1	Assist addressing HQ policy questions	6	$6,000	$600	$300	$6,900		
2	Meetings, conferences, review, coordination	4	$4,000	$400	$200	$4,600		
	Subtotal	**10**	**$10,000**	**$1,000**	**$500**	**$11,500**	**$0**	**$12,000**
	Section Total	**420**	**420,000**	**42,000**	**21,000**	**554,482**	**7,500**	**563,000**

Geotechnical Studies

The work conducted in this parent task will include the review of existing data and the design and execution of a sediment sampling program to determine the physical and chemical characteristics of sediments at potential borrow sites as well as the receiver site. Borings will be required in a number of locations to identify the available sediment quantity of the borrow sites and potential adverse environmental impacts. These findings will provide the basis for the scope

of the Alternative Formulation Briefing (AFB) documentation. A final report will be prepared presenting the results of the geotechnical studies

Borrow Site Investigations & Receiver Site Investigations

This task will entail the design of a sediment sampling program to determine the physical and chemical characteristics of potential borrow and receiver sites. The samples collected will be analyzed to evaluate the physical characteristics of the sediment including grain size distribution, color, hardness, and shape.

Subsurface Mapping

This work will be conducted to determine the composition of the subsurface geotechnical layer. Borings will be necessary at various locations within potential borrow sites to adequately estimate the volume of available sediment and to determine the chemical characteristics of the subsurface layer.

The results of the Geotechnical Studies/Report parent task will be discussed formally with the federal and the City of San Clemente team members to evaluate the findings of the task and to provide a working dialog to streamline the results presented in the draft report.

The data and resultant analysis obtained in conjunction with AFB coordination will be presented in a draft report outlining the findings of each geotechnical studies task. The report will then be submitted for further review. Upon the completion of the review of the draft report, final adjustments will be made to the document allowing for the preparation of the final report.

The following table is a detailed time and cost estimate for Geotechnical Studies by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared: 3-May-2006**

Geotechnical Branch — **By: Ken Raabe**

San Clemente Shoreline Feasibility Study

Feasibiliy Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Baseline conditions geotechnical appendix. Field explorations to determine sediment types, site-specific conditions, and borrow site analysis.	133	$133,000	$13,300	$6,650	$152,950		
2	Sidescan/Profile Contract	0	$0	$0	$0	$100,000		
	Subtotal	**133**	**$133,000**	**$13,300**	**$6,650**	**$252,950**	**$0**	**$253,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Visit site as needed	4	$4,000	$400	$200	$4,600		
2	Data evaluation and input into plan formulation	18	$18,000	$1,800	$900	$20,700		
3	Address F3 Geotech ITR comments	3	$3,000	$300	$150	$3,450		
4	Prepare Report Documentation	20	$20,000	$2,000	$1,000	$23,000		
	Subtotal	**45**	**$45,000**	**$4,500**	**$2,250**	**$51,750**	**$0**	**$52,000**
C	**F-4 Milestone to Public Draft Report**							
1	Respond to F-4 and AFB ITR Comments	3	$3,000	$300	$150	$3,450		
2	Prepare Report Documenation	8	$8,000	$800	$400	$9,200		
	Subtotal	**11**	**$11,000**	**$1,100**	**$550**	**$12,650**	**$0**	**$13,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Assist in response to Public Comments	2	$2,000	$200	$100	$2,300		
2	Finalize report revisions to Geotech Appendix	2	$2,000	$200	$100	$2,300		
	Subtotal	**4**	**$4,000**	**$400**	**$200**	**$4,600**	**$0**	**$5,000**
E	**Final Report Processing (to Chief's Report)**							
1	Assist addressing HQ policy questions	2	$2,000	$200	$100	$2,300		
2	Meetings, conferences, review, coordination	1	$1,000	$100	$50	$1,150		
	Subtotal	**3**	**$3,000**	**$300**	**$150**	**$3,450**	**$0**	**$3,000**
	Section Total	**192**	**192,000**	**19,200**	**9,600**	**320,800**	**0**	**326,000**

Socioeconomic Studies

The socioeconomic studies will include compiling the without-project baseline conditions and maintenance/repair costs required to stabilize the railroad corridor, public facilities, and private properties annually. The with-project conditions will be investigated and benefits are expected to include a major reduction in annual spending to protect the base of the railroad trestle. Comparing with and without project costs over the project life for the various alternatives allows for the determination of the economic benefits of each alternative. This information can be compared to the cost of each alternative plan to determine the economic justification of each alternative, and select the National Economic Development (NED) plan. A final report will be prepared presenting the results of the coastal studies analysis including concerns voiced during the AFB documentation phase. This work will include determining the expenses incurred to both the County of Orange and the City of San Clemente to protect and stabilize the railroad corridor trestle, public facilities, and private properties under the existing without-project conditions.

Recreation Analysis

This analysis will provide important recreational variables and information to evaluate recreational values for the without and with projects conditions. The recreational analysis will include some of the survey data and the recreational analysis provided by Dr. Philip King report. An inventory and description of existing recreation resources within the San Clemente project area will be completed and will include the following

1. Estimate recreation market area. The recreation market area will be determined based upon the type of existing and potential recreation activities for the beaches in the project area and information obtained from local and other recreation experts.

2. Estimate recreation resources in the project area. This involves gathering information form local sponsor (s) and/or local experts to estimate the inventory of recreation resources in the market area.

3. Forecast potential recreation use in the project area. Gather information from the local sponsor(s) and local experts to determine potential recreation use.

4. The method used for computing the value of recreation activity in the project area will be calculated using the unit day method. The method is outlined in ER 1105-2-100.

Coastal Model Development

The economist will work with the Coastal Engineer and Study Manager to formulate the important assumptions for the coastal model. The economist will be responsible for ensuring that the logic of the coastal model accurately calculates the NED damages and adhere to the guidance in ER1105-2-100. Also, the development of the coastal model will include critical economic variables like depreciated replacement values for beach structures, damage functions

for wave force, damage functions for flood inundation, future beach attendance, and important risk factors for economic variables.

With Project Economic Evaluations

This task will include determining the costs of each with project alternative and comparing it to the expenses incurred during the entire life of the project considering the without project conditions. Establishing cost to benefits ratios for each project alternative allows for the determination of a hierarchy of recommended alternatives based on socioeconomics. The results of the Socioeconomic Studies parent task will be discussed formally with the federal and the City of San Clemente team members to evaluate the findings of the task and to provide a working dialog to streamline the results presented in the draft report.

The data and resultant analysis obtained in conjunction with AFB coordination will be presented in a draft report outlining the findings of each socioeconomic task. The report will then be submitted for further review. Upon the completion of the review of the draft report, final adjustments will be made to the document allowing for the preparation of the final report

The following table is a detailed time and cost estimate for Socioeconomic Studies by milestone.

Revised Project Management Plan -Time and Cost Estimate **Prepared: 03-May-06**

Planning Division - Economics & Social Analysis Group (PD-WE) **By: Joe Lamb**

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Survey structures/contents to estimate baseline condition damages, develop coastal/economic analysis model, prepare F3 documentation	100	$100,000	$10,000	$5,000	$115,000		
2	Meetings, conferences, review, coordination	6	$6,000	$600	$300	$6,900		
	Subtotal	**106**	**$106,000**	**$10,600**	**$5,300**	**$121,900**	**$0**	**$122,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Evaluate LA Coastal Model for Errors and Provide Corrections	42	$42,000	$4,200	$2,100	$48,300		
2	Respond to Comments and attend model ITR conference	25	$25,000	$2,500	$1,250	$28,750		
3	Contract Management	4	$4,000	$400	$200	$4,600		
4	Revise the LA Coastal Model according to the changes in assumptions that were agreed to during the March 22, 2006 Executive Meeting	20	$20,000	$2,000	$1,000	$23,000		
5	Review the inputted data for the LA Coastal Model	11	$11,000	$1,100	$550	$12,650		
6	Revise recreation analysis and update with the 2006 UDV	8	$8,000	$800	$400	$9,200		
7	Assist Plan Formulation with getting approval for changes in the Model Assumptions	6	$6,000	$600	$300	$6,900		
8	Corps Review of the Final Coastal Model	6	$6,000	$600	$300	$6,900		
9	NED Plan Selection	8	$8,000	$800	$400	$9,200		
10	Prepare input to F4 Main Report and F4 Economic Appendix	9	$9,000	$900	$450	$10,350		
11	Prepare the Model Appendix	4	$4,000	$400	$200	$4,600		
12	Meetings & Coordination	6	$6,000	$600	$300	$6,900		
13	Participate in F4 conference	1	$1,000	$100	$50	$1,150		
	Subtotal	**150**	**$150,000**	**$15,000**	**$7,500**	**$172,500**	**$0**	**$173,000**
C	**F-4 Milestone to Public Draft Report**							
1	Respond to F4 Comments	4	$4,000	$400	$200	$4,600		
2	Revisions and updates to LA Coastal Model	6	$6,000	$600	$300	$6,900		
3	Revisions and update of Recreation Analysis	3	$3,000	$300	$150	$3,450		
4	Revisions and update of NED plan	3	$3,000	$300	$150	$3,450		
5	Meetings and Coordination	6	$6,000	$600	$300	$6,900		
6	Prepare input to F4 Main Report and F4 Economic Appendix	4	$4,000	$400	$200	$4,600		
7	Participate in AFB conference	1	$1,000	$100	$50	$1,150		
8	Respond to Comments on AFB document	3	$3,000	$300	$150	$3,450		
9	Revisions and updates to analysis	4	$4,000	$400	$200	$4,600		
10	Prepare Input for Draft Report and Draft Appendix	6	$6,000	$600	$300	$6,900		
	Subtotal	**40**	**$40,000**	**$4,000**	**$2,000**	**$46,000**	**$0**	**$46,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Respond to comments/Revise Analysis	4	$4,000	$400	$200	$4,600		
2	Meetings and Coordination	2	$2,000	$200	$100	$2,300		
3	Prepare Input for Draft Report and Draft Appendix	2	$2,000	$200	$100	$2,300		
	Subtotal	**8**	**$8,000**	**$800**	**$400**	**$9,200**	**$0**	**$9,000**
E	**Final Report Processing (to Chief's Report)**							
1	Complete financial analysis/assessment of financial capability	10	$10,000	$1,000	$500	$11,500		
2	Additional analysis, documentation for Chiefs report including meetings, conferences, review, coordination	2	$2,000	$200	$100	$2,300		
	Subtotal	**12**	**$12,000**	**$1,200**	**$600**	**$13,800**	**$0**	**$14,000**
	Section Total	**316**	**$316,000**	**$31,600**	**$15,800**	**$363,400**	**$0**	**$364,000**

Real Estate Analysis/Report

The scope of this parent task will include coordination, determination of land requirements and estates, provision of real estate cost estimates, preparation of the real estate plan, peer level and technical review, and preparation of the final report.

Coordination includes, but is not limited to Real Estate's participation in team meetings, negotiation of work requirements, and coordination with other offices on project data needed for Real Estate's major study products. It also includes initiation of discussions with the non-federal sponsor regarding acquisition policies and procedures (if applicable) as well as coordination with our Legal Branch on potential legal matters. Real Estate will provide schedules for RE acquisition and discuss this with the Project Manager, Study Manager and the sponsor.

Determination of land requirements and estates includes a description of the LERRD's (fee and/or easement) for the project purpose and features required for the construction, operation and maintenance of the project. It also includes verifying property ownerships within the project area, identifying the areas needed for borrow material, and dredged or excavated material disposal, and review of the project by the real estate legal staff for attorney's comments of compensability for utility/facility relocations (if applicable).

The provision of real estate cost estimates includes the preparation of a preliminary market study and a detailed estimate of all real estate costs (gross appraisal if necessary) associated with acquisition of the project's real property requirements. Documents may also be used in crediting the sponsor for Lands, Easements and Right-of-Ways for cost shared projects.

Preparation of the real estate plan and peer level review includes drafting of the Real Estate work product in support of the decision documents. The document must include a discussion of the significant topics as per ER 405-1-12. Additionally the report is reviewed for accuracy, consistency, and all real estate acquisition requirements as they relate to the design and the Sponsor.

Lastly, the final report is drafted and any additional comments are addressed.

The following table is a detailed time and cost estimate for Real Estate by milestone.

Revised Project Management Plan - Time and Cost Estimate					Prepared: 17-May-2006			
Real Estate Division					By: Pete Garcia			
San Clemente Shoreline Feasibility Study								
Feasibiity Phase (PMP)								
Task #	**Task Description**	**Work Days**	**PDT Labor**	**Section Mgmt/Supt**	**Branch Mgmt/Supt**	**Total Labor**	**Non-Labor e.g. Travel**	**Totals (Rounded)**
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$50	$25			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Coordination and Participation in team meetings	2	$2,000	$100	$50	$2,150		
2	Preliminary Market Study/Identify and Determine land ownerships, requirements and estates.	3	$3,000	$150	$75	$3,225		
	Subtotal	**5**	**$5,000**	**$250**	**$125**	**$5,375**	**$0**	**$5,000**
C	**F-4 Milestone to Public Draft Report**							
1	Coordination and Participation in team meetings	3	$3,000	$150	$75	$3,225		
2	Detailed Estimate of all Real Estate Cost	10	$10,000	$500	$250	$10,750		
3	Prepare Preliminary draft of Real Estate Plan	10	$10,000	$500	$250	$10,750		
4	Internal Technical Review	2	$2,000	$100	$50	$2,150		
5	Review of Project by Real Estate Legal Staff	2	$2,000	$100	$50	$2,150		
	Subtotal	**27**	**$27,000**	**$1,350**	**$675**	**$29,025**	**$0**	**$29,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Coordination and Participation in team meetings	1	$1,000	$50	$25	$1,075		
2	Real Estate's Final Draft Report	3	$3,000	$150	$75	$3,225		
	Subtotal	**4**	**$4,000**	**$200**	**$100**	**$4,300**	**$0**	**$4,000**
E	**Final Report Processing (to Chief's Report)**							
1	Issue Resolution	2	$2,000	$100	$50	$2,150		
	Subtotal	**2**	**$2,000**	**$100**	**$50**	**$2,150**	**$0**	**$2,000**
	Section Total	**38**	**38,000**	**1,900**	**950**	**40,850**	**0**	**$40,000**

Environmental and Cultural Resources

The environmental studies conducted within this parent task will include a database search, regulatory agency coordination, and limited field reconnaissance to document existing conditions and analyze potential adverse and beneficial environmental impacts. Potential environmental and social resources that may be affected as a result of the implementation of plan alternatives includes aesthetics, recreation, biological resources, cultural resources, water quality, sediment quality, coastal processes, air quality, and noise. Findings will be discussed during the AFB documentation to streamline the development of the EIS/EIR draft and final report.

Without Project Environmental Baseline Conditions

This task will be conducted to determine the without-project environmental baseline conditions existing within the project area. Areas of interest include background and storm related turbidity levels, benthic and infaunal biological communities, the area locations of existing kelp beds, and biological environment at potential borrow sites.

Environmental Impact Analysis

This work will include an analysis of all potential environmental impacts with project condition alternatives including the construction phase. These impact studies will include coastal processes, with-project turbidity levels, biological resources, sediment compatibility, water quality, air quality, construction related noise levels, aesthetics, and biological environment at borrow sites.

The results of the Environmental Studies parent task will be discussed formally with the federal and the City of San Clemente team members to evaluate the findings and to provide a working dialog to streamline the results presented in the draft EIS/EIR report.

Draft EIS/EIR Report

This task will entail the first submission of the EIR/EIS. This document will evaluate the environmental effects of the alternative plans, including the "no action" alternative. The draft environmental EIR/EIS report will be circulated to allow the State and Federal agencies as well as interested organizations and individuals the ability to provide additional comments and constructive criticisms.

Final EIS/EIR Report

Comments received on the draft EIR/EIS will be addressed, and revisions will be made in accordance with Federal and State law allowing for the preparation of the final report.

Fish and Wildlife Coordination Act Report

This task includes involvement by the U.S. Fish and Wildlife Service (USFWS) in support of the environmental studies required by the Fish and Wildlife Coordination Act. The principal USFWS products are a final Planning Aid Report (PAR) and a Coordination Act Report (CAR). This report will present USFWS opinions on the impacts of the alternative plan formulations on fish and wildlife resources. The amount, quality, and scale of data, as well as the data analysis included in the Service's Scope of Work (SOW) will be consistent with the complexity of decisions for which the data will be used, limitations in funding, time, and the significance of the fish and wildlife resources involved. In addition, the USFWS may recommend types and amounts of measures for habitat losses and, where possible, suggest potential opportunities for ecological restorations. The Corps will coordinate with USFWS and supervise the interagency contract as part of its environmental impact studies task.

Biological Investigations and Construct Habitat/Species Map

Identify for GIS input the invertebrates, fish, mammals and vegetation conduct surveys, map areas and identify distributions as part of biological baseline task. Construct habitat/species maps and input into a GIS format.

Planning Aid Letter

This task work includes the preliminary position document in the process of the preparation of the required USFWS Coordination Act Report (CAR).

Planning Aid Report

This task work includes the analysis and evaluation of impacts resulting from each project alternative.

Draft Coordination Act Report

This task will entail the first submission of the draft Coordination Act Report. This document will evaluate the effects of the alternative plans on fish and wildlife resources. The

draft will be circulated to allow the State agencies and interested organizations and individuals the ability to provide additional comments and constructive criticisms as part of the draft EIS/EIR.

USFWS – Final Coordination Act Report

Comments received on the draft Coordination Act Report will be addressed, and revisions will be made in accordance with Federal allowing for the preparation of the final report.

HTRW Studies/Report

This parent task will be conducted if problems with HTRW or contaminated sediments are identified in the geotechnical investigations. In lieu of HTRW identifications, a response analysis will be initiated to identify and evaluate the proper mitigation alternatives to implement. The first alternative will be avoidance of the problem area. Activities to address the problem could include sampling and analysis to identify contaminates, concentration levels, delineation of site contamination, and assessment of potential threats to human health and environmental habitats, and estimates of cleanup or disposal costs.

Due to previous CCSTWS Orange County Shoreline Study, there are no significant without-project HTRW complications expected. Therefore, the effort conducted for this investigation will be minimal, and will be preceded by a brief summary of the project.

With Project HTRW Assessment

If hazardous materials are encountered during any phase of this feasibility study, a detailed with project HTRW assessment will be conducted to identify and evaluate the proper alternative mitigation measures to pursue. Alternatives will include the identification of contaminates and contaminant concentrations, the delineation of site contamination, assessments to public and environmental health risks, and cleanup or disposal cost estimates.

The results of the HTRW Assessment parent task will be discussed formally with the federal and the City of San Clemente team members to evaluate the findings and to determine the recommended restorative solution.

Draft Report with EIS/EIR Integrations

This task will entail the first submission of the HTRW Assessment Report. The report will be eventually published as either a chapter or appendix of the EIS/EIR depending on the severity of the HTRW findings. The draft HTRW Assessment Report will be circulated to allow the State and Federal agencies and interested organizations and individuals the ability to provide additional comments.

Final Report with EIS/EIR Integrations

Comments received on the draft HTRW Assessment Report will be addressed, and revisions will be made in accordance with Federal and State law, allowing for the preparation of

the final report. Once complete and approval has been authorized the HTRW Assessment Report will be integrated into the EIS/EIR.

Cultural Resources Studies/Report

Cultural resource surveys of the project area will be conducted by means of a record and literature search, and a field survey, to facilitate Section 106 compliance. In the event that any potential historic properties are located during the archeological surveys, National Register eligibility consultations will be prepared to detail the results of the cultural resources investigations. Potential impacts for the preferred project alternative will be submitted to the State Historic Preservation Officer. If any National Register eligible properties are found within the Area of Potential Effects (APE), a Memorandum of Agreement (MOA) may need to be prepared. The MOA will specify mitigation measures to be undertaken.

Without Project Baseline Conditions

This task work will be performed to ascertain previous information available regarding any delicate cultural zones within the project area region.

Resources Survey

A cultural resources survey of the project area (including the necessary borrow sites) will be conducted by means of a field survey. If cultural resources are found during the archeological surveys, National Register eligibility determinations will be prepared to detail the results of the cultural resources investigations. Potential impacts from the preferred project alternative will be submitted to the State Historic Preservation Officer. If any National Register eligible properties are found within the APE, a Memorandum of Agreement (MOA) may need to be prepared. The MOA will specify mitigation measures to be undertaken.

The results of the Cultural Resources Survey parent task will be discussed formally with the federal and the City of San Clemente to evaluate the findings and to determine the recommended restorative solution.

Draft Report with EIS/EIR Integrations

This task will entail the first submission of the Cultural Resources Survey Report. The draft Cultural Resources Survey Report will be circulated to allow the State and Federal agencies and interested organizations and individuals the ability to provide additional comments and constructive criticisms.

Final Report with EIS/EIR Integrations

Comments received on the draft Cultural Resources Survey report will be addressed, and revisions will be made in accordance with Federal and State law, allowing for the preparation of the final report.

The following tables are a detailed time and cost estimate for Environmental and Cultural Resources by milestone.

Revised Project Management Plan -Time and Cost Estimate — **Prepared:** May 15, 2006

Environmental Resources Branch — **By:** Tom Keeney

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Contract	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Conduct surveys. General coordination with biologist & env coordinator. Prep F3 baseline conditions report.	73	$73,000	$7,300	$3,650	$83,950		
2	USF&W Coordination	10	$10,000	$1,000	$500	$11,500		
	Subtotal	**83**	**$83,000**	**$8,300**	**$4,150**	**$95,450**	**$0**	**$95,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Visit site as needed and attend meetings etc.	6	$6,000	$600	$300	$6,900		
2	Biologist & Env Coordinator PDT coordination	20	$20,000	$2,000	$1,000	$23,000		
3	Assist in formulation and evaluation of alternatives including short-term and long-term impacts including HEP analysis, noise, traffic, recreation, etc…	50	$50,000	$5,000	$2,500	$57,500		
4	FWS PAR Updates	15	$15,000	$1,500	$750	$17,250		
5	Prepare F4 Report Documentation	17	$17,000	$1,700	$850	$19,550		
6	Draft USF&W Coord Act Report	5	$5,000	$500	$250	$5,750		
7	Prepare Draft 404 (b)	14	$14,000	$1,400	$700	$16,100		
	Subtotal	**127**	**$127,000**	**$12,700**	**$6,350**	**$146,050**	**$0**	**$146,000**
C	**F-4 Milestone to Public Draft Report**							
1	Detailed analysis of tentatively recommended plan and report documentation for AFB, including prep of responses to F4 ITR comments	30	$30,000	$3,000	$1,500	$34,500		
2	FWS Draft Coordination Act Report of Tentatively Recommended Plan	3	$3,000	$300	$150	$3,450		
3	Participate in AFB conference and respond to applicable HQ policy comments and AFB ITR comments	5	$5,000	$500	$250	$5,750		
4	Prepare NEPA & CEQA documentation for the public draft report	20	$20,000	$2,000	$1,000	$23,000		
5	Final USF&W Coord Act Report	3	$3,000	$300	$150	$3,450		
6	Draft Coastal Consistency Determination	10	$10,000	$1,000	$500	$11,500		
	Subtotal	**71**	**$71,000**	**$7,100**	**$3,550**	**$81,650**	**$0**	**$82,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Prep NOI for Public Mtg, provide contacts for rpt distribution, participate & attend Public Mtg, coordinate with Resource Agencies & Env Groups	12	$12,000	$1,200	$600	$13,800		
2	Respond to applicable public comments and make revisions to the EIS/EIR	20	$20,000	$2,000	$1,000	$23,000		
	Subtotal	**32**	**$32,000**	**$3,200**	**$1,600**	**$36,800**	**$0**	**$37,000**
E	**Final Report Processing (to Chief's Report)**							
1	Assist addressing HQ policy questions	8	$8,000	$800	$400	$9,200		
2	Meetings, conferences, review, coordination	5	$5,000	$500	$250	$5,750		
	Subtotal	**13**	**$13,000**	**$1,300**	**$650**	**$14,950**	**$0**	**$15,000**
	Section Total	**326**	**326,000**	**32,600**	**16,300**	**374,900**	**0**	**$375,000**

Revised Project Management Plan -Time and Cost Estimate — **Prepared:** March 15, 2006

Cultural Resources - Ecosystem Planning Section — **By:** Lydia Lopez-Cruz

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task/ DDR #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$150			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
			$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Literature search. Address potential impacts of proposed alternatives.	7	$7,000	$700	$1,050	$8,750		
2	Provide F4 cultural resources documentation and incorporate into draft EIS/EIR.	7	$7,000	$700	$1,050	$8,750		
3	Meetings, conferences, review, coordination	3	$3,000	$300	$450	$3,750		
	Subtotal	**17**	**$17,000**	**$1,700**	**$2,550**	**$21,250**	**$0**	**$21,000**
C	**F-4 Milestone to Public Draft Report**							
1	Prepare additional detailed documentation for tentatively recommended plan AFB report.	4	$4,000	$400	$600	$5,000		
2	Address F4 ITR comments and AFB HQ policy comments	2	$2,000	$200	$300	$2,500		
3	Meetings, conferences, review, coordination	2	$2,000	$200	$300	$2,500		
	Subtotal	**8**	**$8,000**	**$800**	**$1,200**	**$10,000**	**$0**	**$10,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Address public comments and revise report, as needed	2	$2,000	$200	$300	$2,500		
2	Meetings, conferences, review, coordination	2	$2,000	$200	$300	$2,500		
	Subtotal	**4**	**$4,000**	**$400**	**$600**	**$5,000**	**$0**	**$5,000**
E	**Final Report Processing (to Chief's Report)**							
1	Assist addressing HQ policy questions	1	$1,000	$100	$150	$1,250		
2	Meetings, conferences, review, coordination	1	$1,000	$100	$150	$1,250		
	Subtotal	**2**	**$2,000**	**$200**	**$300**	**$2,500**	**$0**	**$3,000**
	Section Total	**31**	**31,000**	**3,100**	**4,650**	**38,750**	**0**	**$39,000**

Cost Engineering

The Cost Estimates parent task work will include preliminary and draft cost estimates for the analysis of alternative plans, and an MCACES cost estimate for the NED and tentatively selected plan. The Corps will perform the cost estimates for the beach nourishment alternative and the associated dredging operations. This will be developed using the Corps Dredge Estimating Program and will include contingencies, operation, and maintenance costs. The MCACES costs and backup on the results of the Dredge Estimating Program and other cost estimates developed for the associated plan alternatives will be included in a Cost Estimating Appendix with a narrative explaining the basis of each estimate.

Appraisal of Plan Alternatives

The appraisal of plan alternatives will be conducted by the Corps and will include MCACES cost estimation and the Corps Dredge Estimating Program. The cost estimates will include the expected expenses incurred for the contingencies, operation, and maintenance of each plan alternative.

The results from the appraisal of the proposed plan alternatives will be discussed formally with the federal and the City of San Clemente to evaluate the findings and to determine the economic feasibility of each recommended restorative solution.

This task will entail the first submission of the Cost Estimates Report. The report, outlining the cost estimates with a narrative explaining the basis of each estimate, will eventually be published as an appendix of the Feasibility Report. The draft Cost Estimates Report will be circulated to allow the State and Federal agencies and interested organizations and individuals the ability to provide additional comments and to allow initial economic assessment.

Comments received on the draft Cost Estimates Report will be addressed, and revisions will be made in accordance with Federal and State law, allowing for the preparation of the final report.

The following table is a detailed time and cost estimate for Cost Engineering by milestone.

Revisied Project Management Plan - Time and Cost Estimate					Prepared: 04-May-06			
Cost Engineering					By: Juan Dominguez			
San Clemente Shoreline Feasibility Study								
Feasibility Phase (PMP)								
Task #	**Task Description**	**Work Days**	**PDT Labor**	**Section Mgmt/Supt**	**Branch Mgmt/Supt**	**Total Labor**	**Non-Labor e.g. Travel**	**Totals (Rounded)**
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$200	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Visit Site	1	$1,000	$200	$50	$1,250		
2	Meetings, conferences, review, coordination	1	$1,000	$200	$50	$1,250		
3	Research/gatherting information	2	$2,000	$400	$100	$2,500		
4	Sea-Wall Dsgn and Quantities evaluation	5	$5,000	$1,000	$250	$6,250		
5	MCACES (Mii) and/or CEDEP estimates for preliminary alternatives	10	$10,000	$2,000	$500	$12,500		
6	Independent Review (ITR)	3	$3,000	$600	$150	$3,750		
	Subtotal	**22**	**$22,000**	**$4,400**	**$1,100**	**$27,500**	**$0**	**$28,000**
C	**F-4 Milestone to Public Draft Report**							
1	Meetings, conferences, review, coordination	1	$1,000	$200	$50	$1,250		
2	Research/gatherting information	2	$2,000	$400	$100	$2,500		
3	Quantities evaluation	3	$3,000	$600	$150	$3,750		
4	Refine MCACES (Mii) and/or CEDEP estimates	10	$10,000	$2,000	$500	$12,500		
5	Draft Cost Engineering Appendix	2	$2,000	$400	$100	$2,500		
6	Construction Schedule	2	$2,000	$400	$100	$2,500		
	Subtotal	**20**	**$20,000**	**$4,000**	**$1,000**	**$25,000**	**$0**	**$25,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Final Draft Cost Engineering Appendix / Documentation	2	$2,000	$400	$100	$2,500		
2	Independent tech. Review (ITR), address comments	3	$3,000	$600	$150	$3,750		
	Subtotal	**5**	**$5,000**	**$1,000**	**$250**	**$6,250**	**$0**	**$6,000**
E	**Final Report Processing (to Chief's Report)**							
1	Assist addressing HQ policy questions	1	$1,000	$200	$50	$1,250		
2	Meetings, conferences, review, coordination	1	$1,000	$200	$50	$1,250		
	Subtotal	**2**	**$2,000**	**$400**	**$100**	**$2,500**	**$0**	**$3,000**
	Section Total	**49**	**$49,000**	**$9,800**	**$2,450**	**$61,250**	**$0**	**$62,000**

Public Involvement Documents

The Public Involvement Documents task will include developing a mailing list of all public and private interests, including Federal and State clearinghouses, who will be kept informed of study progress and results. A public workshop, including the scoping meeting requirements, will be conducted for the EIS/EIR report in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) guidelines; in addition to, a final public meeting on the draft report and draft EIS/EIR report. Work required for public involvement activities will include arranging and hosting the public workshop and outreach sessions and preparing follow-up documentation.

Initial Public Meeting/NEPA Scoping

This is the first public meeting designed to inform the public of the feasibility study specifics and to provide the additional environmental NEPA studies that will accompany the study/report. Any initial public concerns regarding the study will be documented and addressed in a timely fashion.

Public Workshops in Support of Plan Selection

The purpose of the public workshop is to solicit input concerning study scope, local interests and desires, and the streamlining of concerns to be addressed in the EIS/EIR report. Additionally, it is expected that a separate meeting will be held with interested Federal, State,

and local agencies, including an open workshop for other interested parties. Decisions and clarifications discussed during the Alternative Formulations Briefing will be made public allowing for concerned party input and to ensure public involvement support.

Final Public Meeting

The public meeting will provide the public and organizations an opportunity to comment on the study findings included in the draft report, and the proposed recommended plan and impact analysis presented in the EIS/EIR report. The District will present results of the study, conclusions, and recommendations to the public at a formal public meeting. The meeting will include opportunities for all attendees to present questions, concerns, and opinions regarding the study results, and allow interests the ability to interchange information with the District and the City of San Clemente regarding potential concerns associated with the proposed recommendations. A transcript of the meeting will be prepared and a summary will be developed to be included as part of the study document. Decisions and clarifications discussed during the Feasibility Review Conference will be made public allowing for concerned party input and to ensure public involvement support.

The following table is a detailed time and cost estimate for Public Involvement by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared:** 05-May-06

Public Affairs — **By:** Regina Blasberg

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Public workshop	0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Sponsor/Stakeholder Public Mtgs	3	$3,000	$300	$150	$3,450		
2	Website Updates	1	$1,000	$100	$50	$1,150		
	Subtotal	**4**	**$4,000**	**$400**	**$200**	**$4,600**	**$0**	**$5,000**
C	**F-4 Milestone to Public Draft Report**							
1	Sponsor/Stakeholder Public Mtgs	2	$2,000	$200	$100	$2,300	$1,000	
2	Website Updates	1	$1,000	$100	$50	$1,150		
	Subtotal	**3**	**$3,000**	**$300**	**$150**	**$3,450**	**$1,000**	**$4,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Public Meeting	4	$4,000	$400	$200	$4,600	$1,000	
2	Compile comments and prepare responses	2	$2,000	$200	$100	$2,300		
3	Website Updates	1	$1,000	$100	$50	$1,150		
	Subtotal	**7**	**$7,000**	**$700**	**$350**	**$8,050**	**$1,000**	**$9,000**
E	**Final Report Processing (to Chief's Report)**							
1	Public Involvement Documentation	3	$3,000	$300	$150	$3,450		
2	Website Updates	1	$1,000	$100	$50	$1,150		
	Subtotal	**4**	**$4,000**	**$400**	**$200**	**$4,600**	**$0**	**$5,000**
	Section Total	**18**	**18,000**	**1,800**	**900**	**20,700**	**2,000**	**$23,000**

Plan Formulation and Evaluation

The Plan Formulation and Evaluation parent task includes refining information on the conditions of the present and future resources, further defining related problems and needs, establishing planning objectives, and developing, reviewing, and refining alternative plans selected for study during the feasibility phase of the project. In addition it includes coordination

with the City of San Clemente, preparation and maintenance of the Project Management Plan, monitoring study costs, and setting the schedule required to complete the feasibility study.

Alternatives will be formulated from a variety of improvement and stabilization measures and will display a full array of opportunities, assess their performance, identify a reliable NED plan, and satisfy NEPA requirements. As part of the formulation process, the study will consider technical feasibility, economic feasibility, environmental impacts, and views of the public. The alternatives that pass an initial screening will be evaluated in terms of costs and benefits to determine a NED plan taking into account environmental impacts, regional economic impacts, and social concerns. Plan formulation efforts will lead to the selection of a recommended plan. The NED Plan selected may differ from any locally preferred plans.

Plan Formulation and Evaluation of Preliminary Plans

The plan formulation and evaluation of preliminary plans will be conducted to determine the suitability of the plan alternatives from an engineering, environmental, socioeconomic, and public best interest standpoint. These evaluations will be analyzed and streamlined to determine and identify the recommended plan alternative. The recommended plan is the plan alternative representing the solution with the highest benefit-to-cost ratio that satisfies all engineering design requirements in an environmentally friendly and economically feasible manner.

Plan Formulation and Evaluation for Final Plans

The final effort in Plan Formulation and Evaluation will involve defining implementation requirements for the recommended plan, including Federal and non-Federal responsibilities. The initial construction requirements and future periodic activities and responsibilities for operating and maintaining the completed project, including any environmental mitigation sites, will be described. The magnitude of these activities will be described for the implementation of the recommended alternative plan. All Federal policies and regulations specifying construction, mitigation, operation, and maintenance requirements will be clearly described.

The results of the Plan Formulation and Evaluation parent task will be discussed formally with the federal and the City of San Clemente team members to evaluate the findings and to determine the feasibility of each alternative plan solution. This task will entail the first submission of the Plan Formulation and Evaluation Report. The draft report will be circulated to allow the State and Federal agencies and interested organizations and individuals the ability to provide additional comments.

Comments received on the draft Plan Formulation and Evaluation Report will be addressed, and revisions will be made in accordance with Federal and State law, allowing for the preparation of the final report.

Comments received on the draft Plan Formulation and Evaluation Report, and revisions made in response will be described and incorporated as appropriate into the Division Commander’s Notice.

Final Report Documentation

The Final Report Documentation parent task will include all work necessary to produce and distribute the final feasibility report and supporting documents. This includes addressing all required actions as contained in the Feasibility Review Conference (FRC) Project Guidance Memorandum (PGM) and comments received from public review of the draft report. Tasks also include all work items necessary to support the review process of the final report by the South Pacific Division, Headquarters, and USACE through forwarding of the final report by the Assistant Secretary of the Army for Civil Works (ASA-CW) to the Office of Management and the Budget (OMB) and eventually to Congress. These tasks include providing copies of the report for State and Agency Review, preparing a Record of Decision on the EIS/EIR, answering comments, attending review meetings, and revising the report as necessary.

Reproduction and Distribution of F3 Documentation

This task will entail the reproduction and distribution of the F3 milestone report. The F3 documentation will provide a description of the study area conditions, problems and needs, the established planning objectives and preliminary estimates of costs, benefits, and the potential significant environmental impacts to identify which alternatives warrant further development throughout the duration of the study.

Reproduction and Distribution of F4 Documentation

This task will entail the reproduction and distribution of the F4 milestone report. The F4 documentation will present the full alternative formulation and identification of the NED plan and the tentatively selected plan. Costs, benefits, and environmental impacts will be discussed as well as the proposed Federal and non-Federal implementation requirements. The F4 report will provide the basis for the Alternative Formulation Briefing (AFB).

Reproduction and Distribution of the AFB Documentation

This task will entail the reproduction and distribution of the Alternative Formulation Briefing (AFB) milestone report. The AFB Project Guidance Memorandum (PGM) will determine the actions needed to allow the completion of the draft report for public review.

Reproduction and Distribution of the Draft Report

This task will entail the reproduction and distribution of the Draft Report. The draft report documentation will address the required actions identified in the AFB PGM in finalizing the draft report. The draft report will be reproduced and sent to the South Pacific Division, HQUSACE, and the Office of the Assistant Secretary of the Army for Civil Works representing the basis for a Feasibility Review Conference (FRC) to address any final issues or questions regarding the completion of the study recommendations for the final report. An FRC PGM will be completed by HQUSACE to identify the required actions needed to complete the final feasibility report.

Reproduction and Distribution of the Final Report

This task will entail the reproduction and distribution of the Final Report. This includes addressing all required actions as contained in the FRC PGM, and comments received from public review of the draft report. Tasks also include all work items necessary to support the

review process of the final report by the South Pacific Division, Headquarters, and USACE through forwarding of the final report by the Assistant Secretary of the Army for Civil Works (ASA-CW) to the Office of Management and the Budget (OMB) and eventually to Congress. These tasks include providing copies of the report for State and Agency Review, preparing a Record of Decision on the EIS/EIR, answering comments, attending review meetings, and revising the report as necessary.

Planning Supervision and Administration

The activities involved in the District-wide supervision and administration of tasks involving the conduct of the study and report preparation. The activities involved in the supervision and administration of Planning Division tasks involving personnel in the conduct of the study and report preparation.

The following table is a detailed time and cost estimate for Plan Formulation by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared: May 5, 2006**

Planning Division - Coastal Studies Group (PD-C) — **By: Regina Blasberg**

San Clemente Shoreline Feasiblity Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Manage and oversee PDT to lead and coordinate all in-house, Sponsor and contracted work related to the generation of the F3 baseline conditions report product. Present, lead and participate in formulation and public workshop meetings, provide schedule and funding updates to PM and review interim and final technical work products and submittals	400	$400,000	$40,000	$20,000	$460,000		
2	Noble Contract	0	$0	$0	$0	$71,662		
3	Prepare F3 Report	30	$30,000	$3,000	$1,500	$34,500		
	Subtotal	**430**	**$430,000**	**$43,000**	**$21,500**	**$566,162**	**$0**	**$566,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Lead Study Mgmt & Plan Formulation coordination with PDT providing direction for the analysis, development and comparison of an array of alt plans, identifying tentative recommended plan. Coordination with HQ on study issues. Site visits, meetings.	120	$120,000	$12,000	$6,000	$138,000		
2	F4 Conference Prep and Presentation	5	$5,000	$500	$250	$5,750		
3	Prepare F4 Documentation/Report, Reproduction	20	$20,000	$2,000	$1,000	$23,000	$5,000	
	Subtotal	**145**	**145000**	**14500**	**7250**	**166750**	**5000**	**$172,000**
C	**F-4 Milestone to Public Draft Report**							
1	Oversee PDT detailed analysis of Rec Plan. Prepare report documentation for AFB mtg. Respond to F4 Comments	20	$20,000	$2,000	$1,000	$23,000		
2	Conduct AFB mtg with MSC and HQ. Respond to AFB Policy Comments. Prepare Public Draft Report.	12	$12,000	$1,200	$600	$13,800	$2,500	
3	Reproduce Public Draft Report (Approx. 100 bound reports and 200 CDs) and support letters/documentation for release of public draft	5	$5,000	$500	$250	$5,750	$10,000	
4			$0	$0	$0	$0		
	Subtotal	**37**	**37000**	**3700**	**1850**	**42550**	**12500**	**$55,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Public meeting coordination with ERB and Sponsor.	10	$10,000	$1,000	$500	$11,500		
2	Coordinate HQ Review and Assessment. Lead PDT (and sub-groups) in preparation of report responses/revisions to public comments. Incorporate final ITR Cmts of public draft and any remaining HQ/MSC policy comments.	25	$25,000	$2,500	$1,250	$28,750		
3	Prepare and reproduce final report documentation. Send report to appropriate agencies.	8	$8,000	$800	$400	$9,200	$12,500	
4			$0	$0	$0	$0		
	Subtotal	**43**	**43000**	**4300**	**2150**	**49450**	**12500**	**$62,000**
E	**Final Report Processing (to Chief's Report)**							
1	Assist in preparation of the Commander's Briefing to the Civil Works Board, attend field visit with District & MSC Commander.	10	$10,000	$1,000	$500	$11,500		
2	Attend and assist in Civil Works Board Mtg at HQ	5	$5,000	$500	$250	$5,750		
3	Assist in PED PMP preparation	10	$10,000	$1,000	$500	$11,500		
4	Address any remaining policy questions, review draft Ch's Rpt	12	$12,000	$1,200	$600	$13,800		
	Subtotal	**37**	**37000**	**3700**	**1850**	**42550**	**0**	**$43,000**
	Section Total	**692**	**692,000**	**69,200**	**34,600**	**867,462**	**30,000**	**$898,000**

Technical Review Documents

This task involves the review documents prepared by the members of the Technical Review Team as required by various study milestones.

Independent Technical Review – F3 Documentation

This task work documents the findings of the Review Team prepared after review of the F3 report for the Feasibility Scoping Meeting.

Independent Technical Review – Model Certification

As required by EC 1105-2-407, any model or analytical tool used to define water resources management problems and opportunities, to formulate potential alternatives, to address the problems or take advantage of the opportunities, to evaluate potential effects of alternatives, and to support decision making must be evaluated to assure that high quality methods and tools are being used to enable informed decisions on investments in the Nation's water resources infrastructure and natural environment.

Independent Technical Review – F4 Documentation

This task work documents the findings of the Review Team prepared after review of the F4 report.

Independent Technical Review – AFB Documentation

This task work documents the findings of the Review Team prepared after review of Plan Formulation Reports for the Alternative Formulation Briefing.

Independent Technical Review – Draft Report

This task work documents the findings of the Review Team prepared as a result of the formal review of the Draft Report.

Independent Technical Review – Final Report

This task work documents the findings of the Review Team prepared after formal review of the Final Report.

Washington Level Report Approval (Review Support)

The Washington Level Report Approval task involves the preparation and distribution of the draft feasibility report and support to the Washington Level Review effort.

The following table is a detailed time and cost estimate for Independent Technical Review by milestone.

Revised Project Management Plan - Time and Cost Estimate						Prepared: 15-May-06		
Quality Control Review						By: Regina Blasberg		
San Clemente Shoreline Feasibility Study								
Feasibility Phase (PMP)								
Task #	**Task Description**	**Work Days**	**PDT Labor**	**Section Mgmt/Supt**	**Branch Mgmt/Supt**	**Total Labor**	**Non-Labor e.g. Travel**	**Totals (Rounded)**
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	QC Review F3 Report	9	$9,000	$900	$450	$10,350		
	Subtotal	**9**	**$9,000**	**$900**	**$450**	**$10,350**	**$0**	**$10,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Model Certification	10	$10,000	$1,000	$500	$11,500		
	Subtotal	**10**	**$10,000**	**$1,000**	**$500**	**$11,500**	**$0**	**$12,000**
C	**F-4 Milestone to Public Draft Report**							
1	QC Review F4/AFB Report	25	$25,000	$2,500	$1,250	$28,750		
	Subtotal	**25**	**$25,000**	**$2,500**	**$1,250**	**$28,750**	**$0**	**$29,000**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	QC Review F5 Report	20	$20,000	$2,000	$1,000	$23,000		
	Subtotal	**20**	**$20,000**	**$2,000**	**$1,000**	**$23,000**	**$0**	**$23,000**
E	**Final Report Processing (to Chief's Report)**							
1	QC Backcheck Final Report	25	$25,000	$2,500	$1,250	$28,750		
	Subtotal	**25**	**$25,000**	**$2,500**	**$1,250**	**$28,750**	**$0**	**$29,000**
	Section Total	**89**	**$89,000**	**$8,900**	**$4,450**	**$102,350**	**$0**	**$103,000**

Programs and Project Management

The Programs and Project Management parent task is required to prepare budget documents and monitor funds. The project manager is responsible for managing the overall study cost and schedule through the use of P2 and the related financial systems, preparation of present and future budget year submissions, preparation of project management reports as well as the Schedule and Cost Charge Request (SACCR) as needed, and reporting study status and issues to the District Engineer. The project management structure will continue into the pre-construction and construction engineering and design phases. This work includes the tasks involved in Program and Project Management Division (PPMD) support to the Feasibility Scoping Meeting.

This work includes the tasks involved in PPMD support to the Alternative Review Conference. This work includes the tasks involved in PPMD support to the Alternative Formulation Briefing. This work includes the tasks involved in PPMD support to the preparation and review of the draft feasibility study report. This work includes the tasks involved in PPMD support to the preparation and distribution of the final feasibility study report. This work includes the tasks involved in PPMD support of the review, preparation, and distribution of the District Engineer's (DE's) Notice.

Project Management Plan

The PMP is an attachment to the Feasibility Cost Sharing Agreement defining the planning process, detailed activities to be accomplished, the schedule, and the costs to the Federal Government and to the City of San Clemente.

Towards the end of the feasibility phase, a preliminary Project Management Plan is developed to describe the project activities during Pre-Construction Engineering and Design (PED). In addition to identifying the construction phases, it is a basis for the project cost sharing agreement. A draft PMP will be attached to the draft feasibility report.

PED Cost Sharing Agreement

This task work includes the Cost Sharing Agreement for the implementation and operation of the proposed project between the Federal Government and the City of San Clemente.

The following table is a detailed time and cost estimate for Programs and Project Management Division by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared:** May 5, 2006

Programs & Project Mgmt Division - Civil Works Branch (PM-C) — **By:** Ehsan Eshraghi

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,200	$100	$50			
F-3	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Lead PM oversight responsibilities	18	$21,600	$1,800	$900	$24,300		
2	Program analysts support	13	$11,700	$1,300	$650	$13,650		
3	Scheduler	13	$11,700	$1,300	$650	$13,650		
4	Resource Mgmt	13	$11,700	$1,300	$650	$13,650		
	Subtotal	**57**	**$56,700**	**$5,700**	**$2,850**	**$65,250**	**$0**	**$65,000**
F-4	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1	Lead PM oversight responsibilities (for 1 year)	12	$14,400	$1,200	$600	$16,200		
2	Program analysts support (for 1 year)	12	$10,800	$1,200	$600	$12,600		
3	Scheduler (for 1 year)	12	$10,800	$1,200	$600	$12,600		
4	Resource Mgmt (for 1 year)	12	$10,800	$1,200	$600	$12,600		
	Subtotal	**48**	**46800**	**4800**	**2400**	**54000**	**0**	**$54,000**
F-5	**F-4 Milestone to Public Draft Report**							
1	Lead PM oversight responsibilities (for 1 year)	12	$14,400	$1,200	$600	$16,200		
2	Program analysts support (for 1 year)	12	$10,800	$1,200	$600	$12,600		
3	Scheduler (for 1 year)	12	$10,800	$1,200	$600	$12,600		
4	Resource Mgmt (for 1 year)	12	$10,800	$1,200	$600	$12,600		
	Subtotal	**48**	**46800**	**4800**	**2400**	**54000**	**0**	**$54,000**
F-8	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1	Lead PM oversight responsibilities (for 1 year)	12	$14,400	$1,200	$600	$16,200		
2	Prepare prelim draft PMP for PED Phase	5	$6,000	$500	$250	$6,750		
3	Program analysts support (for 1 year)	12	$10,800	$1,200	$600	$12,600		
4	Scheduler (for 1 year)	12	$10,800	$1,200	$600	$12,600		
5	Resource Mgmt (for 1 year)	12	$10,800	$1,200	$600	$12,600		
	Subtotal	**53**	**52800**	**5300**	**2650**	**60750**	**0**	**$61,000**
HQ	**Final Report Processing (to Chief's Report)**							
1	Lead PM oversight responsibilities	5	$6,000	$500	$250	$6,750		
2	Complete Draft PMP for PED Phase	4	$4,800	$400	$200	$5,400		
3	Program analysts support	3	$2,700	$300	$150	$3,150		
4	Scheduler	3	$2,700	$300	$150	$3,150		
5	Resource Mgmt	3	$2,700	$300	$150	$3,150		
	Subtotal	**18**	**18900**	**1800**	**900**	**21600**	**0**	**$22,000**
	Section Total	**224**	**222,000**	**22,400**	**11,200**	**255,600**	**0**	**$256,000**

Contingencies

No additional contingency funding has been indicated for the study in the current revision of the PMP.

Sponsor Management

The City of San Clemente is the local sponsor for the Feasibility Study and is responsible for providing 50 percent of the cost of the study. All of the local sponsor's contribution to the study may be provided as in-kind services. The Sponsor's Study Manager will be responsible for the management of the assigned local in-kind services with respect to the tasks, budgets and schedules; participate in scoping and reviewing study activities and results; coordinating with appropriate officials for budgeting and executing non-Federal funds; reviewing progress and results; and reaching a decision on plan recommendation.

The following table is a detailed time and cost estimate for Sponsor in-kind credit by milestone.

Revised Project Management Plan - Time and Cost Estimate — **Prepared:** 15-Mar-06

Sponsor In-Kind Coordination — **By:** Regina Blasberg

San Clemente Shoreline Feasibility Study

Feasibility Phase (PMP)

Task #	Task Description	Work Days	PDT Labor	Section Mgmt/Supt	Branch Mgmt/Supt	Total Labor	Non-Labor e.g. Travel	Totals (Rounded)
	Daily PDT Member and Section/Branch Support Labor Estimates (Sec/Br $ reflect % of daily $ applicable to this Project not total daily rate)		$1,000	$100	$50			
A	**Study Start to F3 Milestone (Baseline Conditions)**							
1	Coordination with Corps and Stakeholders and Public Workshop Engineering Studies $70000 Socioeconomic Study $10,000 Planning Supervision and Admin $25,000 Public Involvement, Project Management $47,000	132	$132,000	$13,200	$6,600	$151,800		
	Subtotal	**132**	**$132,000**	**$13,200**	**$6,600**	**$151,800**	**$0**	**$152,000**
B	**F-3 to F-4 Milestone Work (Analysis of Alt Plans)**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
C	**F-4 Milestone to Public Draft Report**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
D	**Public Draft to Final Report (F-5 to F-8 Milestone)**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
E	**Final Report Processing (to Chief's Report)**							
1		0	$0	$0	$0	$0		
	Subtotal	**0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Section Total	**132**	**132,000**	**13,200**	**6,600**	**151,800**	**0**	**$152,000**

ENCLOSURE B: QUALITY CONTROL CERTIFICATION

Completion of Quality Control Activities

The District has completed the Project Management Plan (PMP) for the San Clemente Shoreline Feasibility Study. All quality control activities defined in the generic quality control plan for reconnaissance phase products have been completed. Compliance with clearly established policy principles and procedures, utilizing justified and valid assumptions, has been verified, including whether the PMP meets the City of San Clemente's needs and is consistent with the law and existing Corps of Engineer's policy. All issues and concerns resulting from the independent technical review of the PMP have been resolved.

Certification

Certification is hereby given that 1) the independent technical review process for this PMP has been completed, 2) all issues have been addressed, 3) the streamlining initiatives proposed in this PMP will result in a technically adequate product, and 4) appropriate quality control plan requirements have been adequately incorporated into this PMP. In summary, the study may proceed into the feasibility phase in accordance with this PMP.

_____ _____

Date Chief, Planning Division

ENCLOSURE C: LIST OF ACRONYMS

AFB	Alternative Formulation Briefing
ASA (CW)	Assistant Secretary of the Army for Civil Works
CESPD	South Pacific Division (also SPD)
DE	Division Engineer (Division Commander)
EA	Environmental Assessment
EC	Engineering Circular
EIS	Environmental Impact Statement
EP	Engineering Pamphlet
ER	Engineering Regulation
FCSA	Feasibility Cost Sharing Agreement
FONSI	Finding of No Significant Impact
FRC	Feasibility Review Conference
H&H	Hydrology and Hydraulics
HQUSACE	Headquarters, U.S. Army Corps of Engineers
HTRW	Hazardous, Toxic and Radioactive Waste
MSC	Major Subordinate Command
NAS	Network Analysis System
NED	National Economic Development
NEPA	National Environmental Policy Act
OBS	Organizational Breakdown Structure
P&G	Water Resources Council's Principles and Guidelines
PED	Preconstruction Engineering and Design
PPMD	Programs and Project Management Division
PROMIS	Project Management Information System
PMP	Project Management Plan
RAM	Responsibility Assignment Matrix
ROD	Record of Decision
S&A	Supervision and Administration
SPD	South Pacific Division (CESPD)
USF&WL	U.S. Fish and Wildlife Service
WBS	Work Breakdown Structure
WRDA	Water Resources Development Act